DETREX CHEMICAL INDUSTRIES, INC. - GOLD SHIELD DIVISION
835 INDUSTRIAL HIGHWAY
CINNAMINSON, BURLINGTON COUNTY, NEW JERSEY
EPA ID. NO. NJD047318043

GENERAL INFORMATION AND SITE HISTORY

The Gold Shield Division of Detrex Chemical Industries, Inc. is an active RCRA facility which has been involved in the distribution and storage of chlorinated solvents since 1972. Prior to 1985, the facility was also engaged in the recycling and recovery of spent trichloroethylene.

Detrex leases 8,000 square feet of space within an industrial building located at 835 Industrial Highway on Block 507, Lot 5.01 in Cinnaminson Township, Burlington County, New Jersey. The building, which was built by Whitesell Construction Company in 1971, is located on an 8.78 acre site within an industrial park. The property is bounded on the east and south by the industrial park, to the west by farmland and to the north by residential properties. Information provided by the local tax assessor indicates that prior to 1971 the site was undeveloped, vacant land. The nearest residence is approximately 400 feet from the Detrex facility and there is an estimated population of 22,900 people within a 4 mile radius of the site.

At the time Detrex began operations, no hazardous waste regulations existed that required the company to obtain a permit prior to commencement of operations. The New Jersey Hazardous Waste Regulations became effective on October 8, 1981. An Administrative Consent Order (ACO) was issued to Detrex on October 6, 1981, thereby allowing the facility to continue operations until a permit application was submitted and a decision could be made whether to issue or deny a Hazardous Waste Facility Permit. A public hearing was held on October 30, 1984, at which time, local residents and Cinnaminson Township officials voiced their disapproval of the Detrex facility operations (Att.I). Cinnaminson Township issued a Cease and Desist Order in July 1985. On October 17, 1985 a Hazardous Waste Facility Permit was issued by the New Jersey Department of Environmental Protection (NJDEP), which allowed Detrex to operate as a RCRA non-major hazardous waste transfer, treatment and container and tank storage facility. However, since March 1987, Detrex has only operated as a hazardous waste transfer and storage facility due to its compliance with the "Cease and Desist Order" issued by the Township.

Records on file indicate that Detrex Chemical Industries, Inc. has employed sound operational procedures resulting in relatively few violations of their Hazardous Waste Facility Permit. Those violations cited have primarily dealt with inaccurate manifests and paperwork.

SITE OPERATIONS OF CONCERN

Detrex currently operates as a warehouse facility involved in the distribution and storage of chlorinated solvents. Virgin solvents are sold to customers for use in degreasing operations, with waste solvents being collected only from these same customers. Upon arrival at the facility, spent solvents are classified and then shipped to the appropriate facility for recycling and recovery or disposal.

A staff of six people are employed at the Detrex facility. A small office/administrative area is maintained on the site, however, the majority of the facility is dedicated to warehouse space. The entire interior of the building, excluding the office area, is surrounded by a 3 inch peripheral curbing on a concrete floor, which is absent of drains. This area is capable of containing 10,000 gallons of material in the event of a spill. All operations conducted at the facility are performed inside the building within the bermed area. The only exceptions are two 15,000 gallon storage tanks located outside the building within a separate concrete enclosure. Detrex is permitted to accept the following waste solvents:

1,1,1-trichloroethane
methylene chloride
perchloroethylene
trichlorotrifluoroethane
trichloroethylene

A maximum of 16,500 gallons (300/55-gallon drums) of waste solvent is allowed to be stored on site. According to the facility inspector for the RCRA program in the NJDEP, Division of Hazardous Waste Management (DHWM), the volume of hazardous waste stored on site fluctuates. During the most recent quarter (January to March 1990), a monthly average of 3,850 gallons (70/55-gallon drums) of waste solvent were observed at the facility awaiting removal. Drums of spent solvent are held at the site in areas designated for drum storage until approximately 70 to 80 drums are accumulated, at which time, they are shipped to another facility for recovery and disposal.

There are three above ground bulk storage tanks on site which currently contain virgin product for distribution to Detrex customers. A 4,000 gallon tank located within the warehouse area is used to store virgin perchloroethylene. Outside the facility, two 15,000 gallon tanks are used to store virgin trichloroethylene and virgin 1,1,1-trichloroethane. The outside storage tanks are enclosed in a vault-like structure constructed of a concrete floor and walls, with no drains or outlets. The structure is capable of containing approximately 43,000 gallons of spilled material and a small concrete sump pit, located beneath the tanks, is designed to expedite the removal of materials in the event of such an occurrence.

According to Anna Farrow, facility manager, Detrex currently stores the following amounts (estimated volumes) of virgin product on site:

4,000 to 10,000 gallons trichloroethylene
4,000 to 8,000 gallons trichloroethane
2,000 gallons perchloroethylene
50,000 pounds trichlorotrifluoroethane

Fifty-five gallon drums are filled with virgin product inside the warehouse facility and the containerized product is then delivered to Detrex customers via flatbed truck. The truck loading area, located outside and immediately adjacent to the warehouse portion of the facility, is completely paved.

As previously mentioned, past operations at the site included a solvent recovery process for trichloroethylene. This was accomplished by means of a steam-heated, water-cooled chlorinated solvent distillation unit. The distillation unit consists of a 500 gallon feed tank, the still unit and a 550 gallon distillate storage tank. This unit is currently maintained at the site, however, it has not been operated since March 1987.

There have been three reported spills at the facility, since it began operations in 1972. In 1984, one pint of waste was spilled inside the Detrex building. Another minor spill involving trichloroethylene occurred on August 8, 1988. The latest incident occurred on January 12, 1990 when 6 gallons of 1,1,1-trichloroethylene spilled. According to the warehouse manager, Herm Helms, the spill occurred in the truck loading area outside the building. The area is paved and the spilled material was immediately cleaned up, resulting in no obvious damage to the environment.

Permits issued to the Detrex facility by the NJDEP include the Hazardous Waste Facility Permit issued on October 17, 1985 by the DHWM and three Air Pollution Control permits issued by the Division of Environmental Quality (DEQ) for the operation of the carbon adsorption unit associated with the distillation process and two outside storage tanks.

GROUNDWATER ROUTE

The Detrex Chemical site lies within the Coastal Plain Physiographic Province in New Jersey. The geology of the province is composed of a series of overlying and overlapping southeasterly dipping and thickening sediments. Sands, gravels, silts and clays are the dominant materials composing the unconsolidated Coastal Plain sediments.

The Coastal Plain contains both confined and unconfined aquifers. The four major confined aquifers are the Raritan-Magothy, Englishtown, Mt. Laurel-Wenonah and Kirkwood Formations. The Raritan-Magothy Aquifer is the oldest, thickest and most developed aquifer in the Coastal Plain, consisting of two water-bearing units which act as one hydrologic aquifer system. A large section of the outcrop of the Raritan-Magothy runs parallel with the Delaware River and receives an estimated 47% of its recharge from the river.

In the Raritan-Magothy outcrop area adjacent to the Delaware River, two water-bearing zones are present. The upper zone, usually under water table conditions, includes the water-bearing beds in the upper 70 feet of the formation. In most of the outcrop area, the formations are overlain by the Cape May Formation of Pleistocene age. This formation is generally in hydraulic continuity with the Raritan and Magothy Water Table Aquifer, resulting in a total saturated thickness of as much as 100 feet. The lower artesian zone, generally separated from the upper water table zone by clay beds, is composed of the water-bearing beds in the lower part of the formation. It may be as much as 250 feet thick in the outcrop area, but typically does not exceed 50 feet in thickness along the Delaware River between Palmyra and Burlington. Throughout the Raritan and Magothy outcrop area, wells usually tap the lower artesian aquifer.

Drinking water for the Cinnaminson Township area is provided by the New Jersey-American Water Company, which services approximately 68,000 people. According to Thomas C. Cantwell, production supervisor, the company obtains 100% of their water supply from 17 groundwater wells located within the area from Cinnaminson Township to Beverly Township. The wells, which range in depth from 51 to 287 feet, all draw from the Raritan-Magothy Aquifer. Also, two wells, located in the Cinnaminson Township areas, have been withdrawn from service due to contamination with tetrachloroethylene. The closest public well currently in operation is located 1.4 miles from the Detrex site.

A review of well records on file with the NJDEP, Division of Water Resources indicates there are a sizable number of wells in the area used for both industrial and domestic purposes. The wells generally range in depth from 35 to 136 feet and draw from the Raritan-Magothy Aquifer. The area immediately surrounding the Detrex facility is serviced by public sewer and water supply. Available records indicate the closest private well is approximately 1.5 miles north northwest from the Detrex site, 53 feet in depth and draws from the Raritan-Magothy Aquifer.

The potential for groundwater contamination is minimal due to the fact that all materials on site are contained, no operations occur outside the facility and the area immediately outside the facility, where the truck loading area is located, is paved. It is believed that the area around the facility has been paved since the building was constructed.

SURFACE WATER ROUTE

The Detrex facility is located within 0.5 mile of the Delaware River. General overland drainage in the area would be toward the Delaware River.

There have been no documented releases of hazardous waste from the Detrex site which have resulted in contamination of surface waters in the area. There are no storm drains within the industrial park and natural relief of the parking lot/truck loading area would contain any spills.

Available records indicate the Delaware River is not used for potable or irrigational uses within 4 miles downstream from the Detrex site. However, the Delaware River is used extensively for recreational and industrial purposes in this area. Also, there are downslope freshwater wetlands within 1 mile of the site, as well as a federally endangered species habitat within 1 mile of the site. Specifically, the shortnose sturgeon (Acipenser brevirostrum) whose range includes the Delaware River.

The potential for surface water contamination via runoff is remote due to the lack of storm drains in the area and the fact that the area immediately adjacent to the facility does not drain away from the building.

Detrex does not have any wastewater discharges subject to regulation by the NJDEP, Division of Water Resources.

AIR ROUTE

Detrex Chemical Industries, Inc. is listed as Plant ID #45136 and currently has three air pollution permits issued to their facility. Certification numbers 047778 and 047789 are permits issued to operate the outside storage

tanks containing 1,1,1-trichloroethane and trichloroethylene, respectively. The permits expire on April 7, 1993 and April 11, 1994. Certificate number 067966 is a permit issued for the operation of the carbon adsorption unit at the facility. This unit is designed to reduce trichloroethylene emissions generated during distillation operations. This permit expires on July 18, 1990 and, according to the facility manager, probably will not be renewed. The distillation equipment has not been operated since March 1987 and, at this time, there are no plans to resume the process for recovery of trichloroethylene at this facility.

The NJDEP, DEQ issued an Order against Detrex Chemical Industries, Inc. on January 26, 1984 for the release of emissions from a solvent still into the outdoor atmosphere with a discharge less than 40 feet above grade. Records indicate Detrex complied with the order by March 15, 1984.

Air monitoring was conducted at the Detrex facility on December 6, 1984 by a representative of the Burlington County Health Department. The purpose of the sampling episode was to determine ambient air conditions both within the facility and outside using a Total Volatile Organic Detector and a stack test for trichloroethylene of the influent and effluent gas stream with a toxic gas detection unit. Results of the testing disclosed that ambient air conditions upwind and downwind from the stack were a constant 3 to 5 ppm total volatile organics with no detectable impact. Results from sampling within the facility were from 5 to 15 ppm total volatile organics in the warehouse area, and 7 to 8 ppm total volatile organics within the office portion of the facility. Stack testing results revealed a 200 ppm influent trichloroethylene level and a non-determinable trichloroethylene effluent quality equating to a removal efficiency of not less than 97.5%.

There is only one documented air pollution complaint on record with the NJDEP, DEQ. Tenants adjacent to the Detrex facility complained of intermittant odors entering their office through a common wall shared with Detrex. The investigation conducted by the NJDEP, DEQ, Bureau of Field Operation on April 20, 1987 revealed no apparent odor problems in either the complainant's offices or the Detrex facility.

At the present time, due to limited operations occurring at the facility, the potential for air contamination is minimal.

SOIL

There has been no documented releases of hazardous materials from Detrex onto the soils in the area. As previously mentioned, all operations on site occur within the building. The outside areas immediately adjacent to the facility are paved, therefore, the potential for any spilled product contaminating soils is remote.

DIRECT CONTACT

While the Detrex facility is located within close proximity of a residential area, the potential for direct contact by area residents is minimal. This is due to the fact that all hazardous materials stored on site are secured, either within the building, or in the case of the outside storage tanks, within the concrete vault enclosure.

The potential for direct contact does exist for employees at the Detrex facility. Duties performed by employees, such as the filling of 55-gallon drums with solvents for distribution to customers, as well as the cleaning up of any spilled materials, places these individuals at risk to exposure during their workday.

FIRE AND EXPLOSION

There have been no reported incidents of fire or explosion at the Detrex facility. According to the Cinnaminson Township Fire Marshal, Detrex is a well maintained facility with no record of any serious fire code violations. In addition, all waste solvents accepted at the Detrex facility are not flammable, with trichloroethylene being the only solvent to approach the flammability limit. Due to the non-flammability of the solvents stored on site, the potential for fire or explosion is minimal.

ADDITIONAL CONSIDERATIONS

There is little threat of damage to the flora or fauna in the area due to the fact that all operations at the Detrex facility are conducted within the building. The outside area is paved with no storm drain system or surface water runoff directed away from the facility, thereby eliminating the potential for contamination of the food chain or damage to off-site property.

ENFORCEMENT

The following are a list of enforcement actions taken against Detrex Chemical Industries, Inc.:

January 24, 1984 - An order was issued by the NJDEP, DEQ for violation of the N.J. Administrative Code, Title 9, Ch. 27, Air Pollution Control 17.4 (a) 1. The investigation disclosed total volatile organics (trichloroethylene) being emitted from a solvent still into the outdoor atmosphere with a discharge less than 40 feet above grade.

August 6, 1987 - A Notice of Violation was issued by the NJDEP, DHWM for violation of NJAC 7:26-24.4 (a) 1 for accepting a X726 waste code in violation of Article 15 and 16e of the Hazardous Waste Facility Permit, and NJAC 7:26-7.5 (g) 3 for transporting hazardous waste to an unauthorized facility.

August 6, 1987 - A Notice of Violation was issued by the NJDEP, DHWM for the violation of NJAC 7:26-9.4 (d) 4 V which requires every container of hazardous waste to be arranged so that its identification label is visible.

October 2, 1987 - A Notice of Violation was issued by the NJDEP, DHWM for violation of NJAC 7:26-12.4 (a) 1 which permits storage of a maximum of 300 drums of hazardous waste. Inspection revealed 362 drums stored on site.

December 7, 1987 - A Notice of Civil Administrative Penalty Assessment was issued by the NJDEP, DHWM for violations cited on August 6, 1987. A penalty of $2,500 was assessed against Detrex.

May 2, 1988 - A Notice of Violation was issued by the NJDEP, DHWM against Detrex for violation of NJAC 7:26-12.4 (a) 1. An investigation conducted on April 22, 1988 disclosed Detrex had received spent solvents from non-customers.

October 13, 1988 - A Notice of Civil Administrative Penalty Assessment was issued by the NJDEP, DHWM against Detrex for violation of NJAC 7:26-12.4 (a) 1 cited on May 2, 1988. A penalty of $4,500 was assessed.

RECOMMENDATION

The Detrex facility in Cinnaminson Township appears to be a well maintained and operated hazardous waste facility. There is no evidence of soil, surface water or groundwater contamination as a result of activities conducted at the site. The site, which is classified as a RCRA non-major hazardous waste facility, is inspected every two weeks by the NJDEP, DHWM, Bureau of Central Enforcement, therefore, no additional actions are recommended.

Submitted By:

Janet Smolenski
HSMS IV
Bureau of Planning & Assessment
March 30, 1990

DETREX CHEMICAL INDUSTRIES, INC.
835 INDUSTRIAL HIGHWAY
CINNAMINSON, BURLINGTON COUNTY, NEW JERSEY
EPA ID. NO. NJD047318043

INDEX OF ATTACHMENTS

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2. SITE MAP
3. TAX MAP
4. BURLINGTON COUNTY ROAD MAP.
5. NEW JERSEY ATLAS BASE MAP SHEETS NO. 27 AND 31
6. NEW JERSEY ATLAS GEOLOGIC OVERLAY
7. NEW JERSEY ATLAS WATER SUPPLY
8. WATER WITHDRAWAL POINTS MAP

ATTACHMENTS	DATE	DESCRIPTION
A.	7/17/81	NJDEP HAZARDOUS WASTE INSPECTION REPORT
B.	1/7/83	MEMO FROM NJDEP RE: DISCHARGES FROM DETREX FACILITY
C.	3/21/83	LETTER FROM DETREX CONFIRMING EPA VIOLATIONS CITED
D.	1/26/84	ORDER ISSUED BY NJDEP, DEQ
E.	2/21/84	ADMINISTRATIVE ORDER ISSUED BY NJDEP, DWM
F.	5/4/84	LETTER FROM NJDEP, DEQ RE: ABATEMENT OF AIR POLLUTION CONTROL VIOLATIONS CITED FOR SOLVENT RECLAMATION SYSTEM
G.	10/30/84	REPORT OF PUBLIC HEARING.
H.	12/10/84	INTER-OFFICE MEMO FROM DETREX RE: STACK TEST RESULTS
I.	10/84-7/86	NEWSPAPER ARTICLES RE: DETREX PERMIT AND OPERATION

J.	1/25/85	REPORT FROM BURLINGTON CO. HEALTH DEPT. RE: DETREX FACILITY INSPECTION
K.	10/17/85	HAZARDOUS WASTE FACILITY PERMIT
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M.		AIR POLLUTION CONTROL PERMITS
N.	6/23/86	RCRA PRELIMINARY ASSESSMENT
O.	6/86-8/88	RCRA INSPECTION REPORTS FROM THE NJDEP, DHWM
P.	4/21/87	NJDEP, DEQ FIELD INVESTIGATION REPORT
Q.	5/87-1/90	NOTICES OF VIOLATION AND CIVIL ADMINISTRATIVE PENALTY ASSESSMENTS
R.	10/5/89	LETTER FROM DETREX RE: DECONTAMINATION OF IDLE EQUIPMENT
S.	1/5/89	NOTIFICATION OF A SPILL AT THE DETREX FACILITY
T.	1/31/90	MEMO FROM NJDEP, DHWM, CENTRAL ENFORCEMENT RE: DETREX ENFORCEMENT PROFILE FROM 1983 TO JANUARY 1990
U.		WELL RECORDS
V.	3/15/90	MEMO RE: SITE INSPECTION CONDUCTED ON 3/14/90

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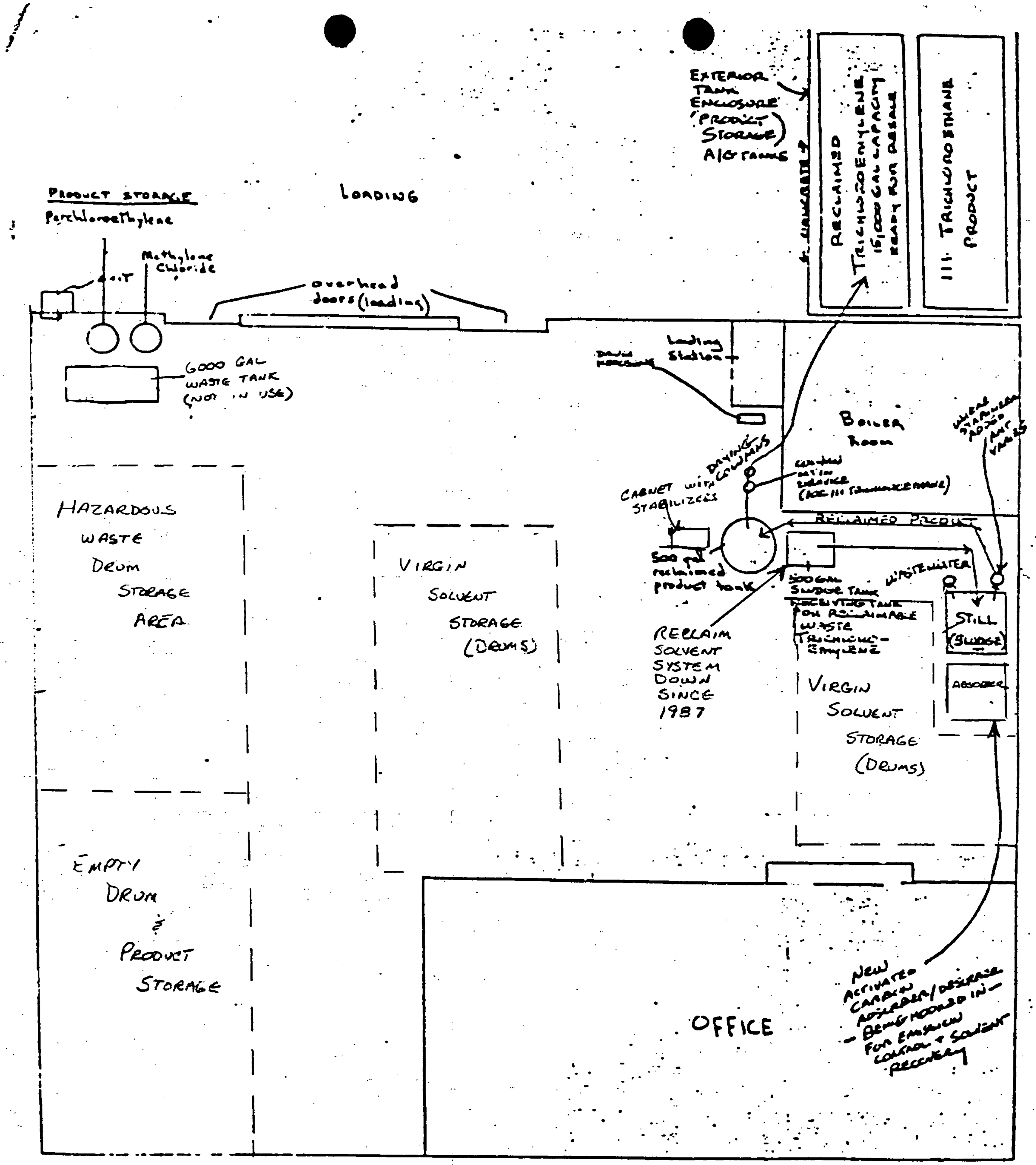
One Mile Radius

Detrex Chemical Industries, Inc.
835 Industrial Highway
Cinnaminson, Burlington County
Latitude 40 05' 40"
Longitude 75 01' 08"

USGS MAP
Beverly, PA.-N.J., Frankford, PA.-N.J., Moorestown and Camden, N.J.-PA. Quads

MAP 1



NOTE: Entire Bldg. excluding office is contained by 3" curbing. All entrances are bermed.
REVISED 4/11/84

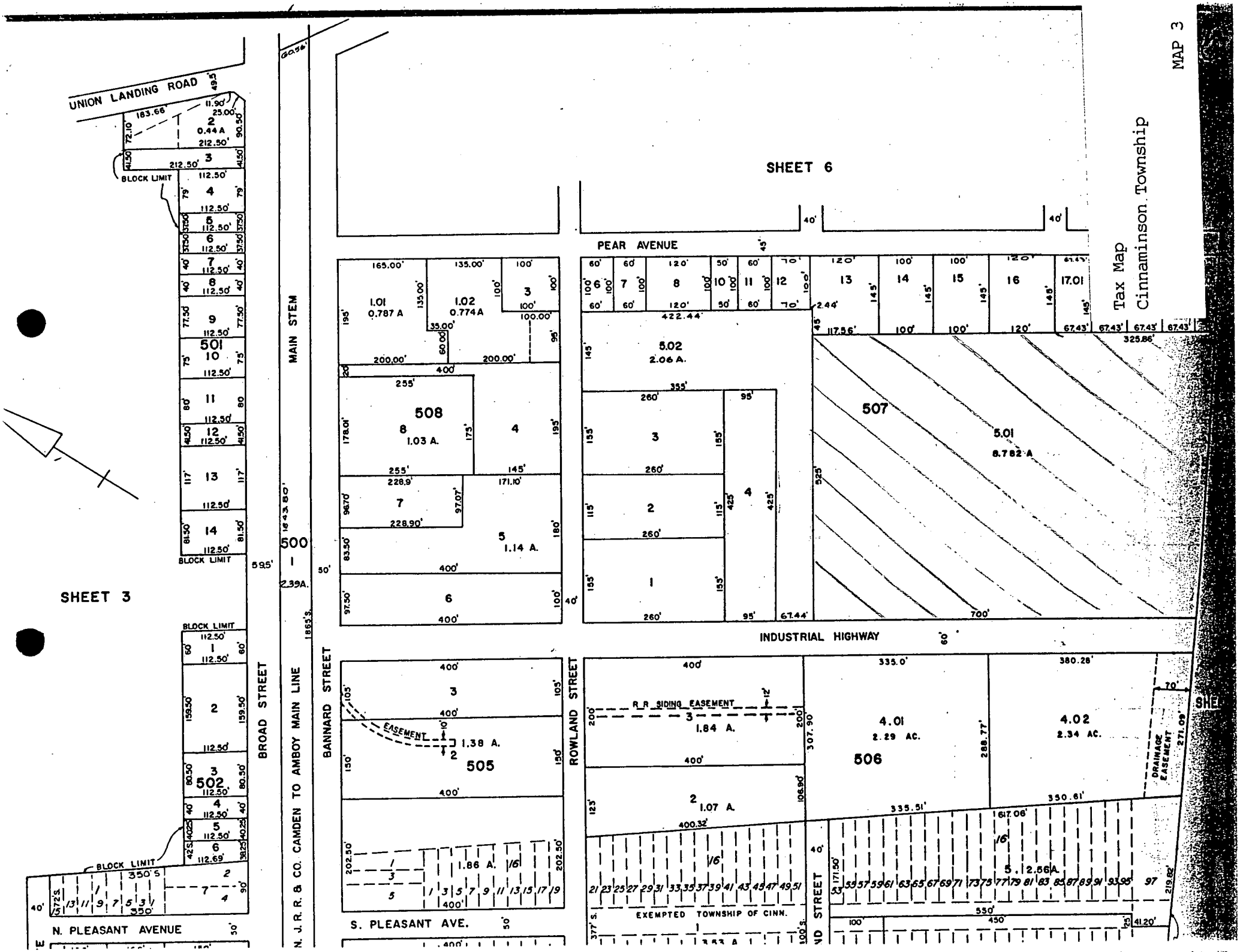
Gold Shield Solvents, Inc.
835 Industrial Highway
Cinnaminson
Burlington Co.
FILE # 03-08-01

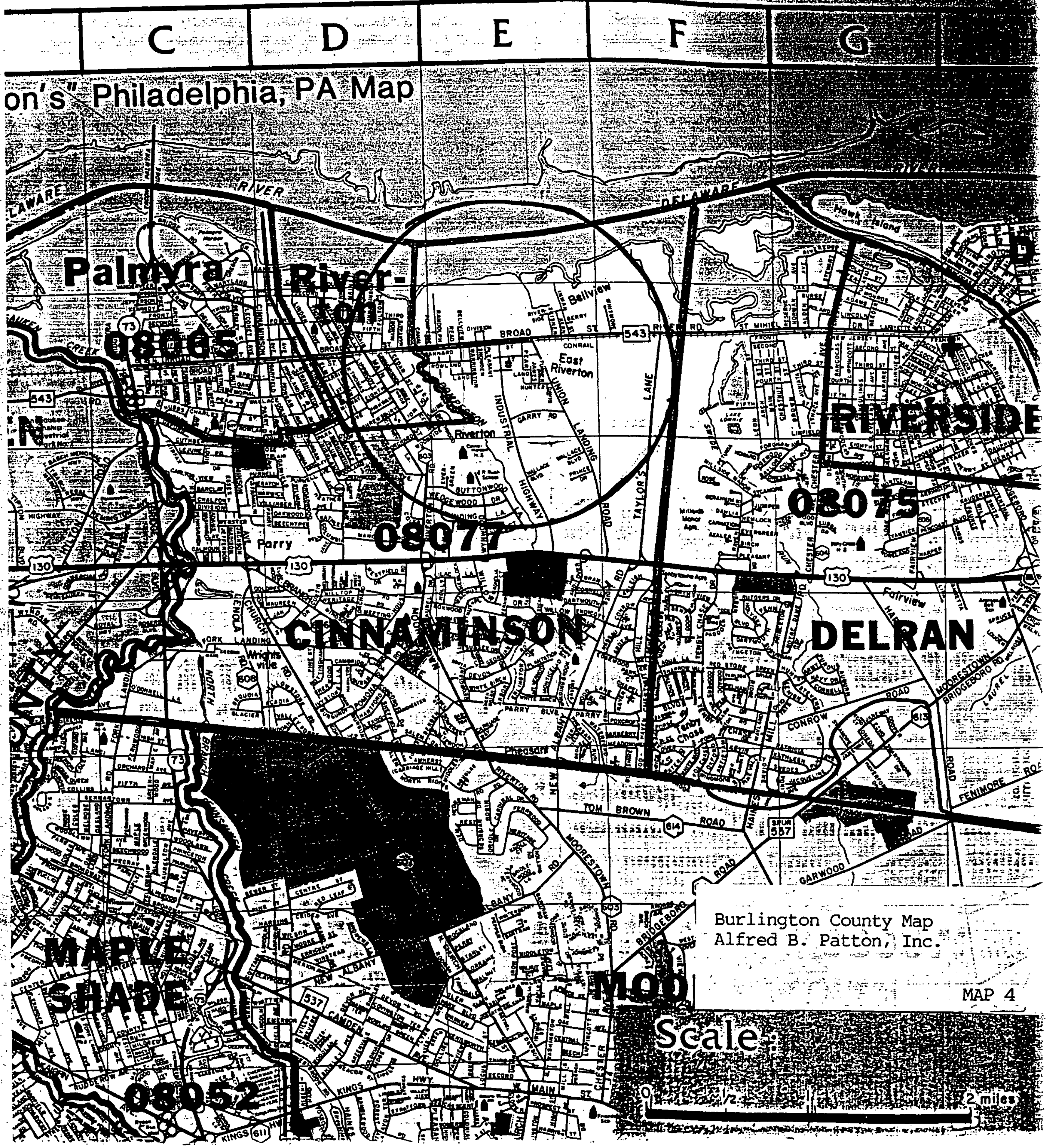
DATE OF INSPECTION: ______

REVISED 1-10-89

Site Map

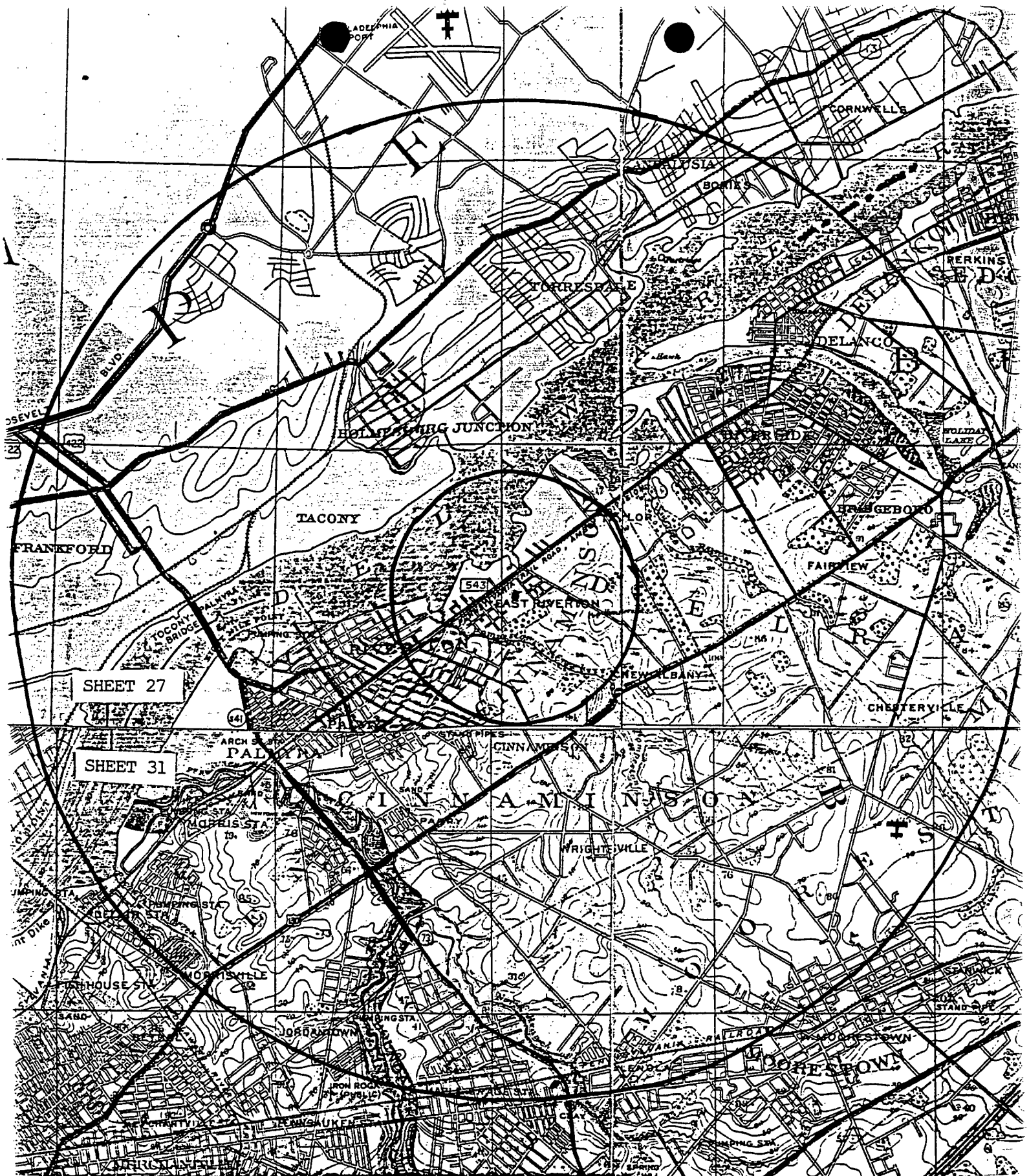
MAP 2


Tax Map
Cinnaminson Township
MAP 3
SHEET 6
SHEET 3
UNION LANDING ROAD
PEAR AVENUE
INDUSTRIAL HIGHWAY
BROAD STREET
MAIN STEM
N. J. R. R. & CO. CAMDEN TO AMBOY MAIN LINE
BANNARD STREET
ROWLAND STREET
N. PLEASANT AVENUE
S. PLEASANT AVE.
BLOCK LIMIT
EASEMENT
R R SIDING EASEMENT
DRAINAGE EASEMENT
EXEMPTED TOWNSHIP OF CINN.
500
501
502
505
506
507
508
1.01 0.787 A
1.02 0.774A
1.03 A.
1.14 A.
1.38 A.
1.84 A.
1.07 A.
1.86 A.
2.06 A.
4.01 2.29 AC.
4.02 2.34 AC.
5.01 8.782 A
5. 2.56A.
2.39A.



Burlington County Map
Alfred B. Patton, Inc.

MAP 4



Scale: 1 Mile to an inch.

Miles 1 ¾ ½ ¼ 0 1 2 3

Yards 1000 500 0 1000 2000 3000

Meters 1000 500 0 1000 2000 3000

A. HOEN & CO. BALTIMORE, MD

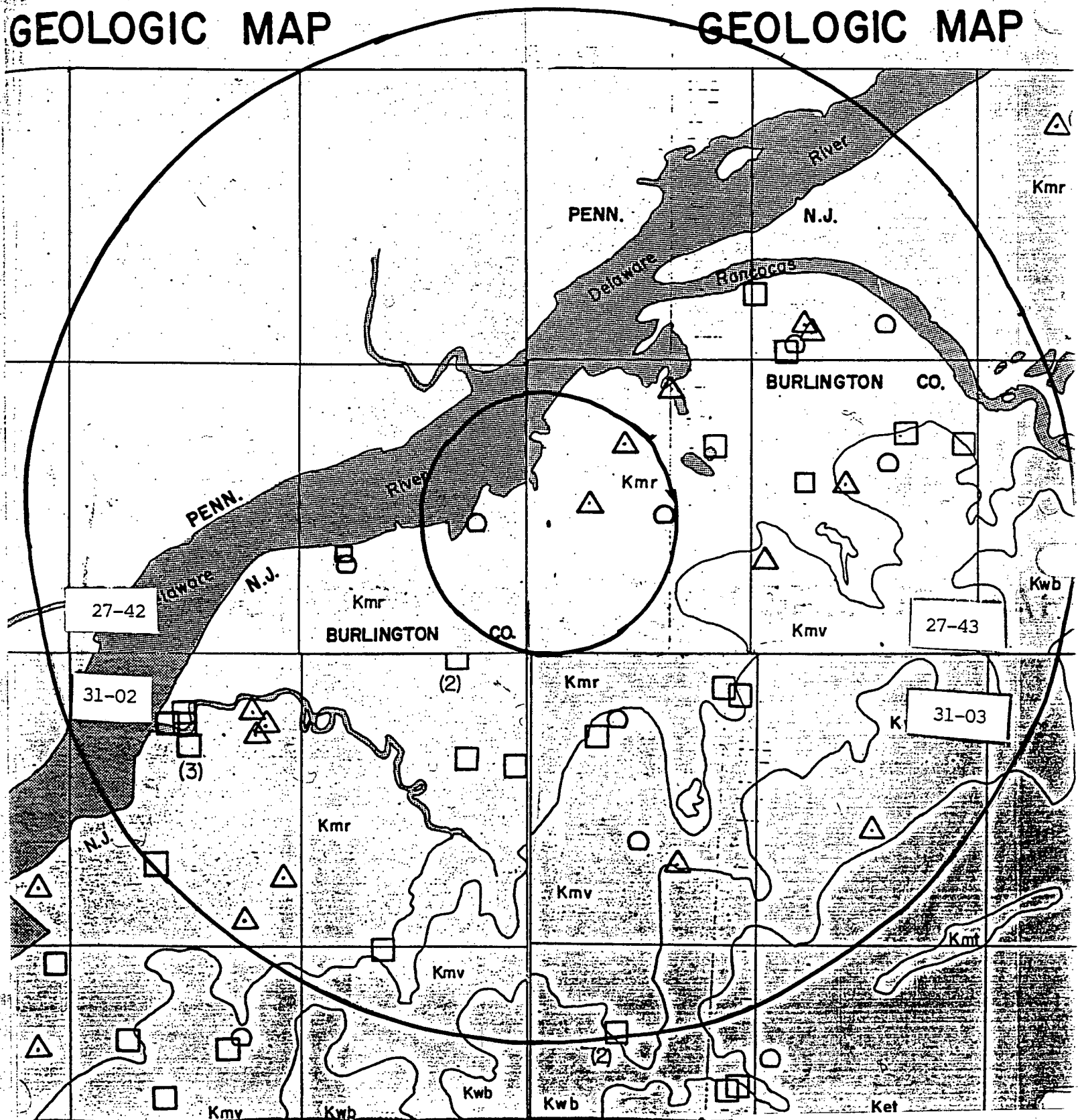
Contour interval equals 10 feet

New Jersey Atlas Base Map
Sheets #27 and #31

MAP 5

GEOLOGIC MAP

GEOLOGIC MAP



Scale: 1 Mile to an Inch.

Miles 1 0 1 2 3

Yards 1000 800 0 1000 2000 3000

Meters 1000 500 0 1000 2000 3000

A. HOEN & CO. BALTIMORE, MD

New Jersey Atlas Geologic Overl
Sheets #27 and #31

MAP 6

LEGEND FOR ATLAS SHEET

△	INDUSTRIAL WELL YIELD OVER 70 GALLONS PER MINUTE
□	PUBLIC SUPPLY WELL YIELDING OVER 70 GALLONS PER MINUTE
⊕	UNSUCCESSFULL ROCK WELL YIELDING LESS THAN 70 GALLONS PER MINUTE
⊙	UNSUCCESSFULL SAND WELL YIELDING LESS THAN 70 GALLONS PER MINUTE
⊡	NO TEST – NO DATA ON YIELD
———	FAULT (DASHED WHERE INFERRED)
———	CONTACT (DASHED WHERE INFERRED)
PIEDMONT / COASTAL PLAIN	PHYSIOGRAPHIC PROVINCE BOUNDARY
———	WATER SUPPLY TRANSMISSION LINE

SEDIMENTARY ROCKS

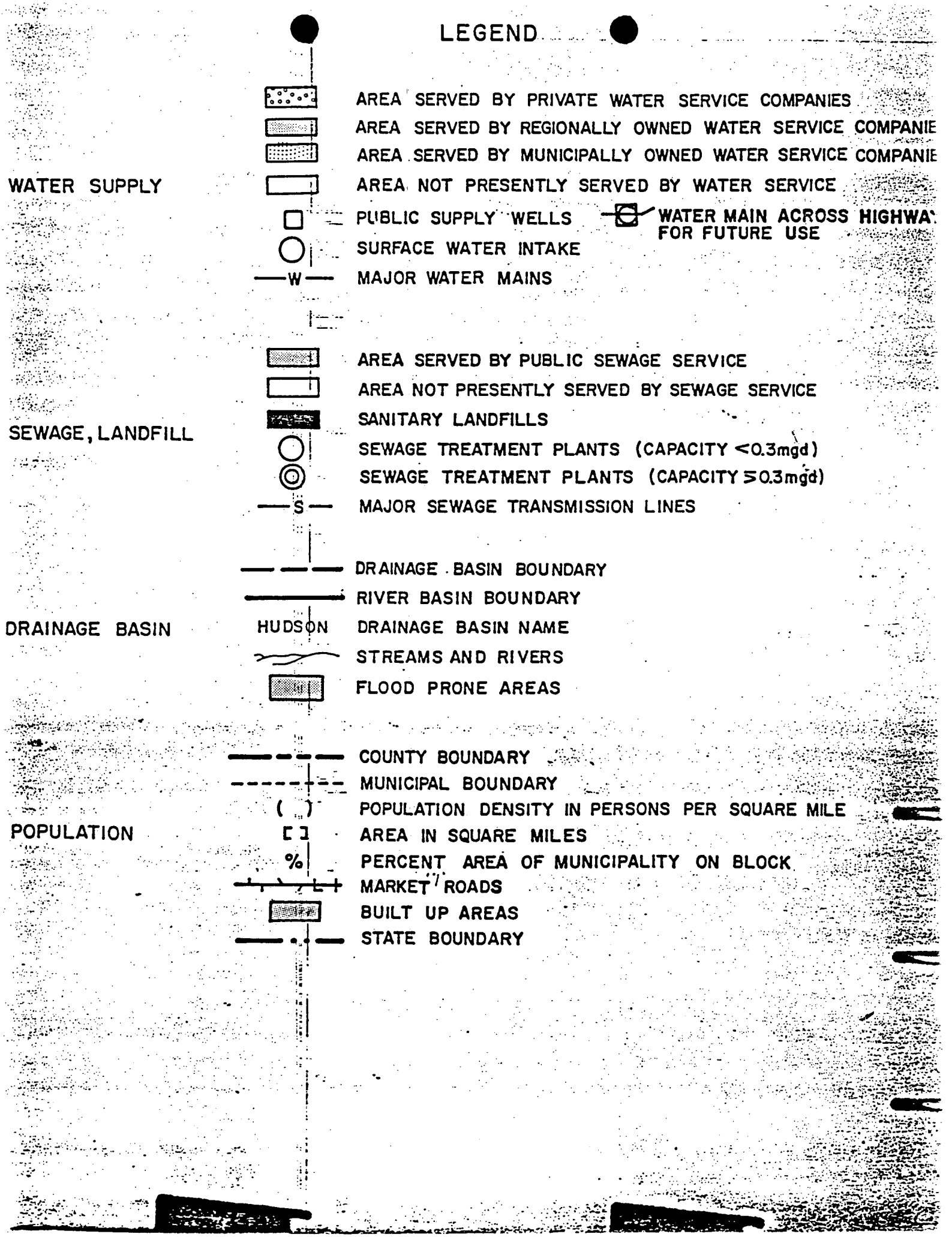
TERTIARY

Tbh	BEACON HILL GRAVEL
Tch	COHANSEY SAND
Tkw	KIRKWOOD SAND
Tmq	MANASQUAN MARL
Tvt	VINCENTOWN SAND
Tht	HORNERSTOWN MARL

CRETACEOUS

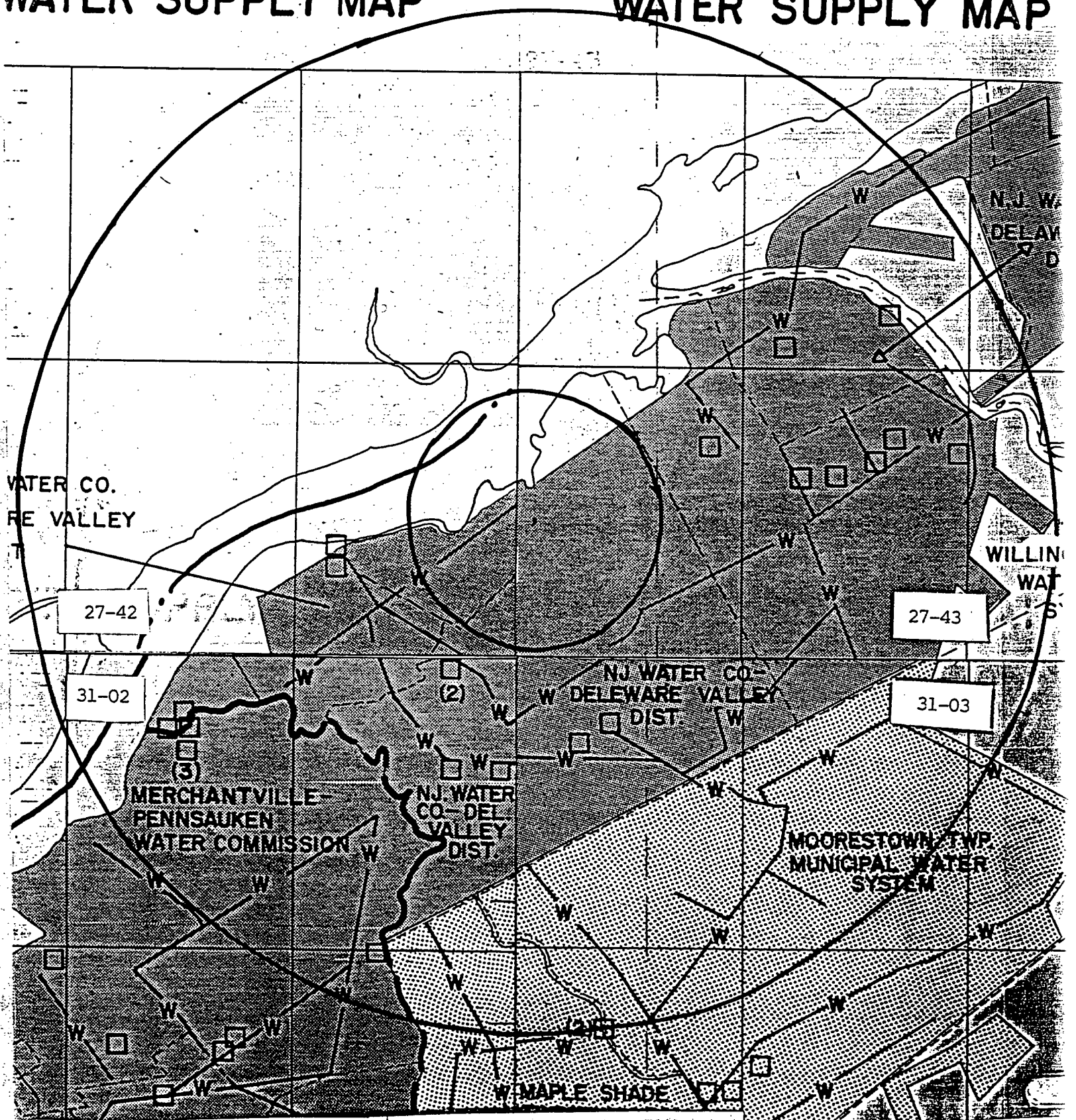
Krb	RED BANK
Krbt	RED BANK (TRANSITIONAL UNIT)
Krbg	RED BANK (GLAUCONITE SAND UNIT)
Kns	NAVESINK MARL
Kml	MOUNT LAUREL SAND
Kw	WENONAH SAND
Kmt	MARSHALLTOWN FORMATION
Ket	ENGLISHTOWN SAND
Kwb	WOODBURY CLAY
Kmv	MERCHANTVILLE CLAY
Kmr	MAGOTHY AND RARITAN FORMATIONS
Km	MAGOTHY FORMATION
Kr	RARITAN FORMATION

LEGEND


WATER SUPPLY
AREA SERVED BY PRIVATE WATER SERVICE COMPANIES
AREA SERVED BY REGIONALLY OWNED WATER SERVICE COMPANIE
AREA SERVED BY MUNICIPALLY OWNED WATER SERVICE COMPANIE
AREA NOT PRESENTLY SERVED BY WATER SERVICE
PUBLIC SUPPLY WELLS
WATER MAIN ACROSS HIGHWA
FOR FUTURE USE
SURFACE WATER INTAKE
W
MAJOR WATER MAINS
SEWAGE, LANDFILL
AREA SERVED BY PUBLIC SEWAGE SERVICE
AREA NOT PRESENTLY SERVED BY SEWAGE SERVICE
SANITARY LANDFILLS
SEWAGE TREATMENT PLANTS (CAPACITY <0.3mgd)
SEWAGE TREATMENT PLANTS (CAPACITY ≥0.3mgd)
S
MAJOR SEWAGE TRANSMISSION LINES
DRAINAGE BASIN
DRAINAGE BASIN BOUNDARY
RIVER BASIN BOUNDARY
HUDSON
DRAINAGE BASIN NAME
STREAMS AND RIVERS
FLOOD PRONE AREAS
POPULATION
COUNTY BOUNDARY
MUNICIPAL BOUNDARY
( )
POPULATION DENSITY IN PERSONS PER SQUARE MILE
[ ]
AREA IN SQUARE MILES
%
PERCENT AREA OF MUNICIPALITY ON BLOCK
MARKET ROADS
BUILT UP AREAS
STATE BOUNDARY

WATER SUPPLY MAP

WATER SUPPLY MAP



Scale: 1 Mile to an Inch.

Miles 1 3/4 1/2 1/4 0 1 2 3

Yards 1000 500 0 1000 2000 3000

Meters 1000 500 0 1000 2000 3000

A. HOEN & CO. BALTIMORE, MD

Contour interval equals 10 feet

New Jersey Atlas Water Supply Map
Sheets #27 and #31

MAP 7

I. Water Well Records

Location	Owner	Year Drilled	Screen Setting or Depth of Casing	Total Depth	g/m Yield	Formation
31-02-195	Paragon Oil Co., #1	1961	51-61	61	100	Kmr
31-02-225	City of Camden, #4-A	1960	95-130	134	1585	"
31-02-227	" #5-NA	1960	79-114	121	1529	"
31-02-228	" #3	1953	73-107	136	1000	"
31-02-228	" #8	1953	89-124	141	1000	"
31-02-228	" #10	1960	75-115	118	1529	"
31-02-235	Kingston Trap Rock	1955	55-65	68	125	"
31-02-238	" #2	1966	115-123	127	200	"
31-02-238	Atlantic Blue Diamond Corp.	1958	100-110	110	180	"
31-02-281	City of Camden	1975	140-180	190	1200	"
31-02-293	Meadow Brook Swim Club	1963	97-107	107	200	"
31-02-297	H&H Industries	1959	71-81	81	100	"
31-02-331	Riverton-Palmyra Water Co. #16	1965	144-176	192	1034	"
31-02-331	" #13	1963	166-197	206	610	"
31-02-361	Delaware Valley Water Co., #28	1969	225-260	264	1200	"
31-02-363	" #31	1970	215-261	267	1002	"
31-02-419	New Jersey Water Co., #50	1958	139-170	176	1000	"
31-02-427	" #25	1961	305-367	399	1050	"
31-02-433	Merchantville-Pennsauken Water Co.	1968	109-139	139	882	"
31-02-442	City of Camden, Test #6	1954	153-175	181	210	Kr
31-02-443	New Jersey Water Co., #44	1950	154-186	187	1400	Kmr
31-02-443	" #45	1950	141-173	173	955	"
31-02-443	" #46	1950	148-178	179	1400	"
31-02-443	" #48	1954	122-164	171	1412	"
31-02-444	City of Camden, #16	1954	149-179	181	1000	"
31-02-449	Savar Amusement Corp.	1949	169-189	189	450	"
31-02-451	H. Kohnstomm & Co., Inc., #5-A	1967	163-184	194	200	"
31-02-451	"	1959	133-158	158	250	"
31-02-451	New Jersey Water Co., #52	1965	147-198	198	1404	"
31-02-451	" #38	1933	126-162	166	846	"
31-02-451	" #47	1953	159-175	177	1012	"
31-02-462	Parks Dairies	1958	154-170	172	200	"
31-02-477	Camden Co. Park Commission	1950	186-217	217	1200	"
31-02-492	Merchantville-Pennsauken Water Comm., #9	1956	107-137	141	875	"
31-02-492	" #10	1963	223-258	262	1000	"
31-02-496	" #2-A	1965	110-140	143	900	"
31-02-496	" #1-R	1971	132-152	159	875	"
31-02-519	" Test Well	1963	118-138	160	400	"
31-02-537	" Test Well #1	1956	247-268	293	317	"
31-02-554	" #2	1962	245-285	300	1040	"
31-02-561	" #6	1957	242-277	283	1020	"
31-02-575	Camden Co. Board of Ed.	1967	322-401	401	320	"
31-02-621	Merchantville-Pennsauken Water Comm., #7	1958	240-275	330	1000	"
31-02-692	" #8	1960	207-237	240	875	"
31-02-694	New Jersey Water Co., #22	1960	371-453	497	1067	"
31-02-697	" #24	1961	112-167	186	1051	"
31-02-699	"	1967	376-427	430	1030	"

31-02-712	City of Camden, Test #5	1953	205-225	277	280	Kmr
31-02-712	"	1953	185-225	243	1000	"
31-02-712	" #17	1954	230-265	274	1000	"
31-02-714	"	1953	90-115	123	1000	"
31-02-716	Our Lady of Lourdes Hospital	1963	237-257	261	275	"
31-02-718	A. N. Stoll Werck, Inc.	1950	111-131	136	210	"
31-02-725	Boro.of Collingswood, #3-R	1960	257-287	294	1000	Kr
31-02-728	" #2-B	1960	248-278	308	1000	Kmr
31-02-754	Friendship Dairy, #1	1955	143-164	164	100	"
31-02-773	Boro.of Collingswood,Test #1	1964	307-333	370	-	"
31-02-774	A.M.Ellis Theatres,Inc.,#3	1961	83-103	115	250*	"
31-02-781	Boro.of Collingswood, "B"	1965	224-313	336	1034	"
31-02-782	" "A"	1965	219-312	331	1034	"
31-02-837	New Jersey National Guard	1956	96-111	111	150	"
31-02-857	Morgan Brothers, Inc.	1967	431-451	451	302	"
31-02-865	Joe's Trailer Camp	1955	112-122	122	70	"
31-02-879	Twp. of Haddon, #4	1965	417-448	455	1000	"
31-02-879	" #3	1956	432-469	490	800	"
31-02-887	" Bd.of Ed.,#1	1966	142-162	165	200	"
31-02-887	" New #1	1968	401-479	481	870	"
31-02-898	Boro.of Haddonfield,Test #1	1965	490-510	510	350	"
31-02-899	"	1967	307-372	380	1029	"
31-02-982	New Jersey Water Co.,#23	1960	321-378	405	1001	"
31-02-982	" #13	1953	491-527	527	1200	"
31-02-986	Hunt Tract Swimming Club	1957	232-243	243	90	"

*Indicates use as a recharge well.

J. Geodetic Control Survey monuments described in Index Map 48; Adjacent Index Maps 44,49,54,55

SUBJECT TO REVISION

WATER WITHDRAWAL POINTS AND NJGS CASE INDEX SITES WITHIN 5.0 MILES OF:

LATITUDE 400110
LONGITUDE 745945

DRAFT

SCALE: 1:63,360
(1 Inch = 1 Mile)

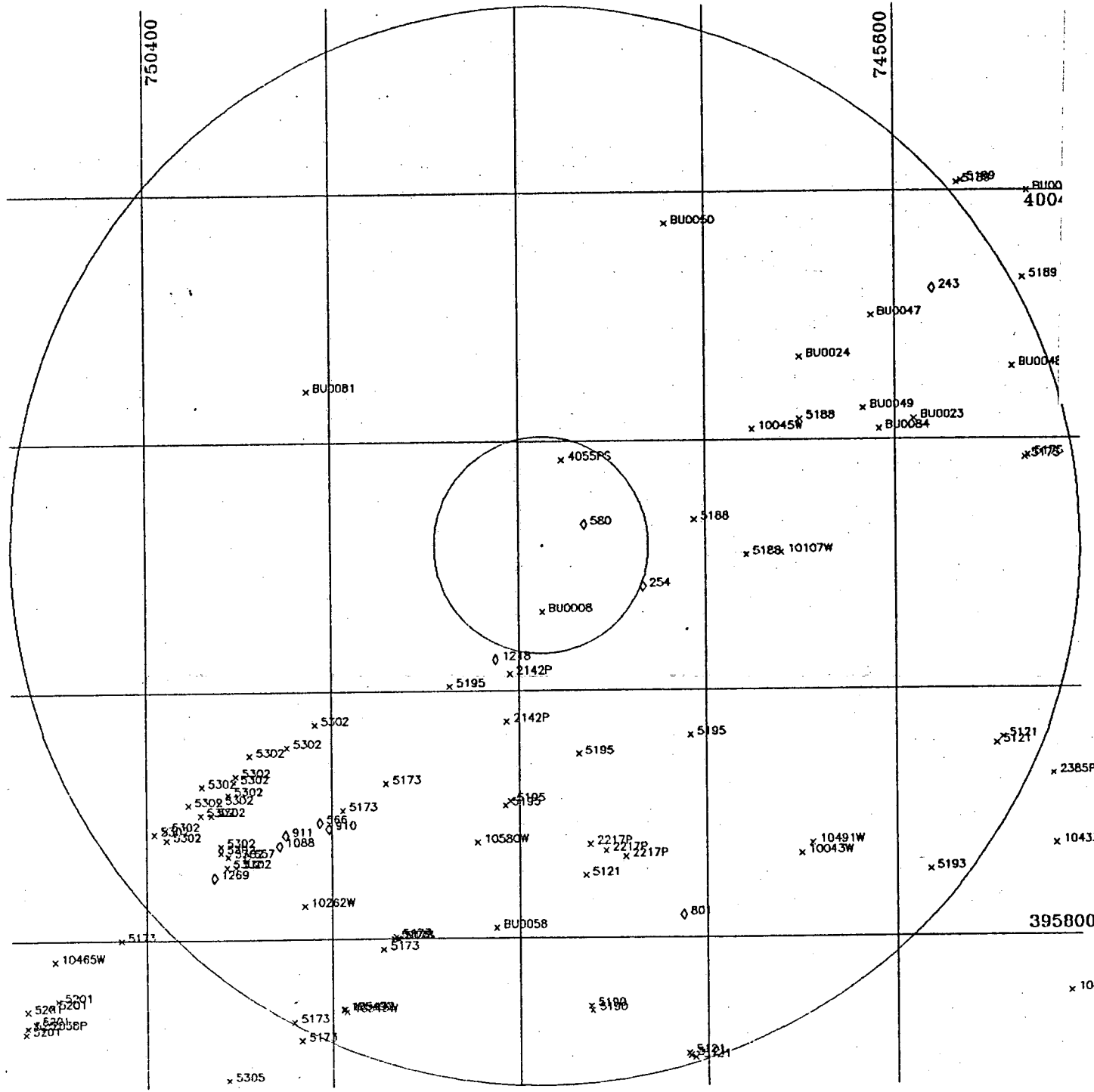
× WATER WITHDRAWAL POINTS
◊ NJGS CASE INDEX SITES
1 MILE AND 5 MILE RADII INDICATED

NJGS CASE INDEX DATA RETRIEVED FROM:
NEW JERSEY GEOLOGICAL SURVEY
ON 12/22/87

PLOT PRODUCED BY:
NJDEP
DIVISION OF WATER RESOURCES
BUREAU OF WATER ALLOCATION
CN-029
TRENTON, NJ 08625

DATE: 02/08/90

SUBJECT TO REVISION



NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
10043W	FIRST PRESBYTERIAN CHURCH	3104691	1	395840	745700	F	3.7	05	22		GWR		
10045W	RIVERSIDE BOARD OF EDUCATION	2704523	1	400205	745730	T	2.2	05	30		GWR		
10107W	HOLY CROSS HIGH SCHOOL	2702921	1	400106	745712	F	2.2	05	10	174	GWR		400
10262W	SCHAEVITZ ENGINEERING	3103338	1	395816	750218	T	4.0	07	27		GWR		
	SCHAEVITZ ENGINEERING	3103437	2	395816	750218	T	4.0	07	27		GWR		
	SCHAEVITZ ENGINEERING	3103444	3	395816	750218	T	4.0	07	27		GWR		
10422W	LUND'S FISHERIES, INC.	3700314	2	395733	745409	T	6.4	09	05	286	CTCH		50
10433W	R.C.A.	3103714	1	395844	745418	F	5.5	05	22	221	GWR		200
10465W	WEST BANK OIL	DELAWARE	RIVER	395750	750500	F	6.0	07	27		SDDEL		
10491W	MOORESTOWN FIELD CLUB	3104770	1	395845	745653	T	3.7	05	22	302	GWR		
10545W	SYCAMORE RIDGE APARTMENTS	3127629	3	395725	750151	T	4.7	07	27		GWR		45
10580W	STAR GAS SERVICE	3129179	1	395846	750027		2.8	05	19		GWR		50
2038P	GENERAL COLOR CO.	3105064	6	395718	750507		6.5	07	08	184	GWR		0
2142P	RIVERTON COUNTRY CLUB	3118428	1A	400008	750006	S	1.2	05	31	119	GWR		500
	RIVERTON COUNTRY CLUB	2704844	2	395945	750008	S	1.7	05	31	174	GWR		500
2217P	CAMPBELL CONTAINER COMPANY	3105715	1	395839	745852	T	3.0	05	22	272	GWR		500
	CAMPBELL CONTAINER COMPANY	3103673	2 RECHARGE	395845	745915	T	2.8	05	22	266	GWR		
	CAMPBELL CONTAINER COMPANY	3103674	1 OBS.	395842	745905	T	2.9	05	22	268	GWR		
2325P	MOORESTOWN FOURSOME PARTNERSHP	LAKE A	LAKE A	395918	745420	T	5.2	05	22		GWR		600
4055PS	NEW JERSEY AMERICAN WATER CO.	SURFACE WATER	1	400151	745932		0.8	05	08		SDDEL		315
5121	MOORESTOWN TOWNSHIP	5100041	3	395703	745811		4.9	05	22	299	GWR		700
	MOORESTOWN TOWNSHIP	3103806	4	395936	745452		4.6	05	22	339	GWR		700
	MOORESTOWN TOWNSHIP	3104663	5	395704	745812		4.9	05	22	290	GWR		700
	MOORESTOWN TOWNSHIP	3104727	6	395702	745808		5.0	05	22	290	GWR		700
	MOORESTOWN TOWNSHIP	3105202	7	395830	745918		3.1	05	22	385	GWR		
	MOORESTOWN TOWNSHIP	3105367	8	395933	745456		4.6	05	22	332	GWR		700
5173	MERCHANTVILLE-PENNSAUKEN WATER	3101417	DEL GARD 2	395800	750417		5.4	07	27	147	GWR		700
	MERCHANTVILLE-PENNSAUKEN WATER	3102915	MARION 1	395720	750225		5.0	07	27	279	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3104641	MARION 2	395711	750220		5.1	07	27	262	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3105110	NATL HWY 1	395902	750153		3.1	07	27	231	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3100010	PARK AVE 1	395800	750117		3.9	07	27	274	GWR		1005
	MERCHANTVILLE-PENNSAUKEN WATER	5100064	PARK AVE 2	395800	750118		3.9	07	27	262	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3103534	PARK AVE 3	395801	750119		3.9	07	27	277	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3100011	PARK AVE 5	395800	750120		3.9	07	27	290	GWR		1005
	MERCHANTVILLE-PENNSAUKEN WATER	3114564	PARK AVE 6	395755	750127		4.0	07	27	270	GWR		1000
	MERCHANTVILLE-PENNSAUKEN WATER	3119207	NATL HWY 2	395915	750125		2.6	07	27	211	GWR		1000
5175	WILLINGBORO TOWNSHIP	2701615	1	400235	745408	T	5.2	05	38	199	GWR		1400
	WILLINGBORO TOWNSHIP	2702941	4 SEALED	400152	745435	T	4.6	05	38	280	GWR		1400
	WILLINGBORO TOWNSHIP	2709561	11	400151	745437	T	4.6	05	38	280	GWR		1400
5188	NEW JERSEY-AMERICAN WATER CO.	2705202	FAIRVIEW30	400122	745807		1.4	05	10	235	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	2703080	LEON 19	400122	745907		1.4	05	10	130	GWR		700
	NEW JERSEY-AMERICAN WATER CO.	2704951	TAYLOR 29	400210	745700		2.7	05	30	120	GWR		
	NEW JERSEY-AMERICAN WATER CO.	2704247	CHESTER 23	400105	745734		1.9	05	10	168	GWR		
	NEW JERSEY-AMERICAN WATER CO.	2704690	CHESTER 24	400105	745734		1.9	05	10	150	GWR		
5189	NEW JERSEY-AMERICAN WATER CO.	2700356	15	400404	745520		5.1	05	02	58	GWR		750
	NEW JERSEY-AMERICAN WATER CO.	2701529	16	400405	745517		5.1	05	02	51	GWR		800
	NEW JERSEY-AMERICAN WATER CO.	2705315	32	400318	745438		5.1	05	12	167	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	2704050	22	400315	745409		5.5	05	12	123	GWR		
5190	MAPLE SHADE TOWNSHIP	3100060	2	395725	745914		4.3	05	19	126	GWR		140
	MAPLE SHADE TOWNSHIP	3106020	9	395727	745915		4.3	05	19	280	GWR		760
	MAPLE SHADE TOWNSHIP	3112925	11	395727	745915		4.3	05	19	450	GWR		1250
5193	MT. LAUREL TOWNSHIP MUA	3125130	7	395832	745539	F	4.7	5	24	644	GWR		1400
5195	NEW JERSEY-AMERICAN WATER CO.	3104697	14NEWALBAN	395938	745810		2.2	05	05	325	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	3104733	2aNEWALBAN	395935	745810		2.2	05	05	225	GWR		800
	NEW JERSEY-AMERICAN WATER CO.	3103835	10 POMONA	395929	745922		2.0	05	08	281	GWR		900

NUMBER	NAME	SOURCEID	LOCID	LAT	LON	LLACC	DISTANCE	COUNTY	MUN	DEPTH	GEO1	GEO2	CAPACITY
	NEW JERSEY-AMERICAN WATER CO.	3104276	12 PONONA	395929	745922		2.0	05	08	196	GWR		700
	NEW JERSEY-AMERICAN WATER CO.	3105321	28 STEPHEN	395904	750009		2.4	05	08	264	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	3105437	31 STEPHEN	395906	750006		2.4	05		263	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	3104576	13HIGHLAND	400002	750044		1.6	05		197	GWR		700
	NEW JERSEY-AMERICAN WATER CO.	3104864	27HIGHLAND	400002	750044		1.6	05		176	GWR		1000
5201	NEW JERSEY-AMERICAN WATER CO.	3103456	50	395726	750618		6.5	07	08	170	GWR		700
	NEW JERSEY-AMERICAN WATER CO.	3104780	51	395720	750513		6.5	07	08	192	GWR		1300
	NEW JERSEY-AMERICAN WATER CO.	3104847	52	395715	750519		6.6	07	08	198	GWR		1050
	NEW JERSEY-AMERICAN WATER CO.	3118947	53	395728	750502		6.3	07	08	194	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	3118944	54	395731	750458		6.2	07	08	195	GWR		1000
	NEW JERSEY-AMERICAN WATER CO.	3120270	55	395718	750518		6.6	07	08	176	GWR		1050
5302	CAMDEN CITY, WATER DIVISION	5100050	MORRIS 1	395944	750211		2.7	07	27	107	GWR		1600
	CAMDEN CITY, WATER DIVISION	3100945	MORRIS 3	395933	750229		3.0	07	27	107	GWR		1800
	CAMDEN CITY, WATER DIVISION	3104252	MORRIS 4	395929	750253		3.4	07	27	134	GWR		1600
	CAMDEN CITY, WATER DIVISION	5100051	MORRIS 6	395900	750318		4.0	07	27	138	GWR		1700
	CAMDEN CITY, WATER DIVISION	5100052	MORRIS 7	395916	750303		3.6	07	27	125	GWR		1680
	CAMDEN CITY, WATER DIVISION	3100944	MORRIS 8	395910	750307		3.7	07	27	128	GWR		1670
	CAMDEN CITY, WATER DIVISION	3104251	MORRIS 10	395919	750302		3.6	07	27	118	GWR		1400
	CAMDEN CITY, WATER DIVISION	5100076	MORRIS 9	395906	750313		3.9	07	27	148	GWR		1670
	CAMDEN CITY, WATER DIVISION	3116814	MORRIS 12	395914	750324		3.9	07	27	122	GWR		2030
	CAMDEN CITY, WATER DIVISION	3115745	MORRIS 11	395900	750325		4.1	07	27	149	GWR		2030
	CAMDEN CITY, WATER DIVISION	3116813	MORRIS 13	395905	750333		4.1	07	27	135	GWR		2060
	CAMDEN CITY, WATER DIVISION	5100053	DELAIR 1	395848	750347		4.5	07	27	141	GWR		1680
	CAMDEN CITY, WATER DIVISION	5100054	DELAIR 2	395851	750355		4.5	07	27	146	GWR		1830
	CAMDEN CITY, WATER DIVISION	5100055	DELAIR 3	395853	750348		4.4	07	27	135	GWR		1830
	CAMDEN CITY, WATER DIVISION	5100056	PUCHACK 1	395845	750312		4.1	07	27	141	GWR		1500
	CAMDEN CITY, WATER DIVISION	5100057	PUCHACK 2	395842	750312		4.1	07	27	169	GWR		1000
	CAMDEN CITY, WATER DIVISION	5100058	PUCHACK 3	395840	750307		4.1	07	27	176	GWR		1280
	CAMDEN CITY, WATER DIVISION	5100059	PUCHACK 5	395835	750308		4.2	07	27	186	GWR		1324
	CAMDEN CITY, WATER DIVISION	3108526A	PUCHACK 7	395835	750302		4.1	07	27	180	GWR		2260
5305	MERCHANTVILLE-PENNSAUKEN	3104642	WOODBINE 1	395852	750307		5.7	07	24	288	GWR		1000
	MERCHANTVILLE-PENNSAUKEN	3114563	WOODBINE 2	395852	750307		5.7	07	24	227	GWR		1000
BU0008	HUNTER, JOHN	POND 1	POND 1	400038	745945	F	0.6	05	08	12	SDDEL		800
BU0023	PENNINGTON, FRANK	RANCOCAS	STREAM 1	400210	745548	F	3.6	05	09		SDRAN		500
BU0024	RUSS BROTHERS	RANCOCAS CREEK	STREAM 1	400240	745660	T	3.0	05	09		SDRAN		
BU0047	VARSACI, JAMES & SONS	POND 1	POND 1	400300	745615	F	3.7	05	12	12	GWR		
BU0048	F & M VARSACI PRODUCE	2701065	WELL 1	400235	745445	F	4.7	05	12	176	GWR		500
	F & M VARSACI PRODUCE	POND 1	POND 1	400235	745445	F	4.7	05	12	6	GWR		
BU0049	VARSACI, JAMES & SONS	POND 1	POND 1	400215	745620	F	3.2	05	12	2	GWR		
BU0050	VARSACI, JAMES & SONS	RANCOCAS CREEK	STREAM 1	400345	745825	F	3.2	05	12		SDRAN		
BU0058	SOLD	STREAM 1	STREAM 1	395805	750015	F	3.6	05	24		SDRAN		
	SOLD	POND 1	POND 1	395805	750015	F	3.6	05	24	15	GWT		
BU0073	CHANT, HARRY R.	27-4480	WELL 1	400400	745435	F	5.6	05	09	155	GWR		300
BU0081	HEISLER, EDGAR B.	2702664	WELL #1	400225	746215	F	2.6	05	06	215	GWV		600
BU0084	RUSS, GEORGE	RANCOCAS CREEK	STREAM 1	400205	745610	F	3.3	05	09		SDRAN		

Number of Observations: 100

USER'S LOCAL INDEX SITES WITHIN 5.0 MILES OF 400110 LAT. 745915 LON. AS OF 12/22/87 (IN ORDER BY SITE NUMBER) - 02/08/90

SITEID	NAME	LAT	LON	DISTANCE	CONTAM	FMUSE1	FMUSE2	STATUS1	STATUS2
243	COSDEN CHEMICAL COATINGS, BEVERLY, BURLINGTON CO.	400313	745536	4.3	80	2080	0	9	
254	CINNAMINSON WELL CONTAMINATION, BURLINGTON CO.	400050	745840	1.0	00	2080	0	1	E
756	SHORE OIL AND CHEMICAL, PENNSAUKEN, CAMDEN CO.	395856	750208	3.3	00	2080	0	1	E
880	HOECHNES-INTERLAKE, CINNAMINSON TWP., BURLINGTON CO.	400120	745718	0.4	00	2080	0	9	
457	CAMDEN'S PUCHACK WELL FIELD, CAMDEN CO.	395840	750255	4.0	39	2080	0	1	
501	REN FASTENING SYSTEMS, MOORESTOWN, BURLINGTON CO.	395811	745815	3.7	00	2050	2060	1	E
910	MERCHANTVILLE/PENNSAUKEN WATER COMMISION, PENNSAUKEN, CAMDEN CO.	395853	750202	3.3	00	0102	2080	1	C
911	PENLAR ANODIZING, PENNSAUKEN, CAMDEN CO.	395850	750230	3.6	00	2080	0	1	C
1068	GARDEN STATE MOTORS, PENNSAUKEN, CAMDEN CO.	395845	750254	3.7	53	2080	0	1	B
1218	NEW JERSEY WATER COMPANY, RIVERTON-PALMYRA, BURLINGTON CO.	400015	750015	1.1	05	2088		1	
1269	ADVANCED PROCESS SUPPLY, PENNSAUKEN, CAMDEN CO.	395830	750316	4.3	00	2090		1	B

Number of Observations: 11

HAZARDOUS WASTE INVESTIGATION

Inspector: D. Potts Date: 7/17/81

Location: Detrex Chemical Industries, Inc. (Gold Shield Solvents Div.)
609-786-8686
St: 835 Industrial Highway - (Unit #1)

Town: Cinnaminson (Riverton)

County: Burlington

Lot: 5-1 Block: 507

Origin of Complaint: Investigation assignment

Complaint: Possible unregistered solvent recovery facility.

Findings:

I arrived at the above site along with Donna Dawson, SWA, at 1000 on the above date where we met Mr. Dale Russell, Branch Mgr. Prior to inspecting the facility, we sat down and discussed the following.

There are two operations conducted at the Cinnaminson facility. One is the storage of 55 gal. drums of "industrial chemical specialties", which are manufactured at the Detroit facility and stored at the Cinnaminson facility. This building serves as a warehouse and distribution center for the chemical products. According to Mr. Russell, there are no mixing and blending operations associated with this line of their business, (see attached product line description).

The second operation at the Cinnaminson site is the recovery of solvents. Different companies will pay to have Detrex (Gold Shield Solvents) to pick up spent solvents. They will in turn buy back clean solvents from Detrex. This Co. distributes TCE, 1-1-1 Trichloroethane, methylene chloride, and perchloroethylene. They recover only one solvent - TCE exclusively. They recovered 13,375 lbs. of TCE in June, 1981.

Their recovery process operates as follows: spent TCE is brought back in 55 gal. drums and pumped into a 5000 gal. sludge storage tank. All contents of this tank are pumped directly into the still which is 375 gal. capacity. Recovered, clean solvent is pumped into a different 500 gal. storage tank. The still bottoms from the recovery operation are pumped into a 4,000 gal. storage tank. (Approximately 250 gal. waste generated/wk.) All of the above operations are conducted in a building (Unit #1) which is leased by Detrex and has no internal drainage system. The 500 gal. tank used for storage of clean solvent aslo serves to mix the solvents. From this tank the solvents are pumped into two (2) 15,000 gal. storage tanks located outside the building. These tanks are diked with a concrete base and walls. Sidewalls extend up to the roof, built over the tanks.

Aside from the recovery of TCE, this co. also buys virgin perchloroethylene and methylene chloride and stores them in 1,500 gal. storage tanks inside the warehouse building. In addition to bulk storage, there is also an area set aside for storage of clean solvent in 55 gal. drums.

In the warehouse, I observed 140 each 55 gal. drums which contained spent solvent (other than TCE). These drums are being stored temporarily and according to Mr. Russell will be shipped to Marisol or another recovery facility soon.

ATTACHMENT A-1

I checked manifests for all incoming spent solvents. All shipments have been manifested according to Mr. Russell and my investigations showed that they were filled out properly. I found three (3) manifests that were not state approved manifests which had been used to transport spent solvents as follows:

1. Form manifes #1 - Gen. - CW Industries, 130 James Way, South Hampton 18966
   Transporter - Detrex Chem. Ind., Inc.
   TSD - Detrex Chem. Ind. Inc.

2. Form manifest #001 - Gen. - Harowe Servo Controls, Inc. Westtown Rd. and West Chester Pike, West Chester, PA 19380
   Transporter - Detrex Chem. Inc., Inc.
   TSD - Detres Chem. Ind., Inc.

3. Form manifest (no number) - Gen. - Spraque Griffiths Div., 346 East Walnut Lane, Phila, PA 19144
   Transporter - Detrex Chem. Ind.,
   TSD - Detres Chem. Ind., Inc.

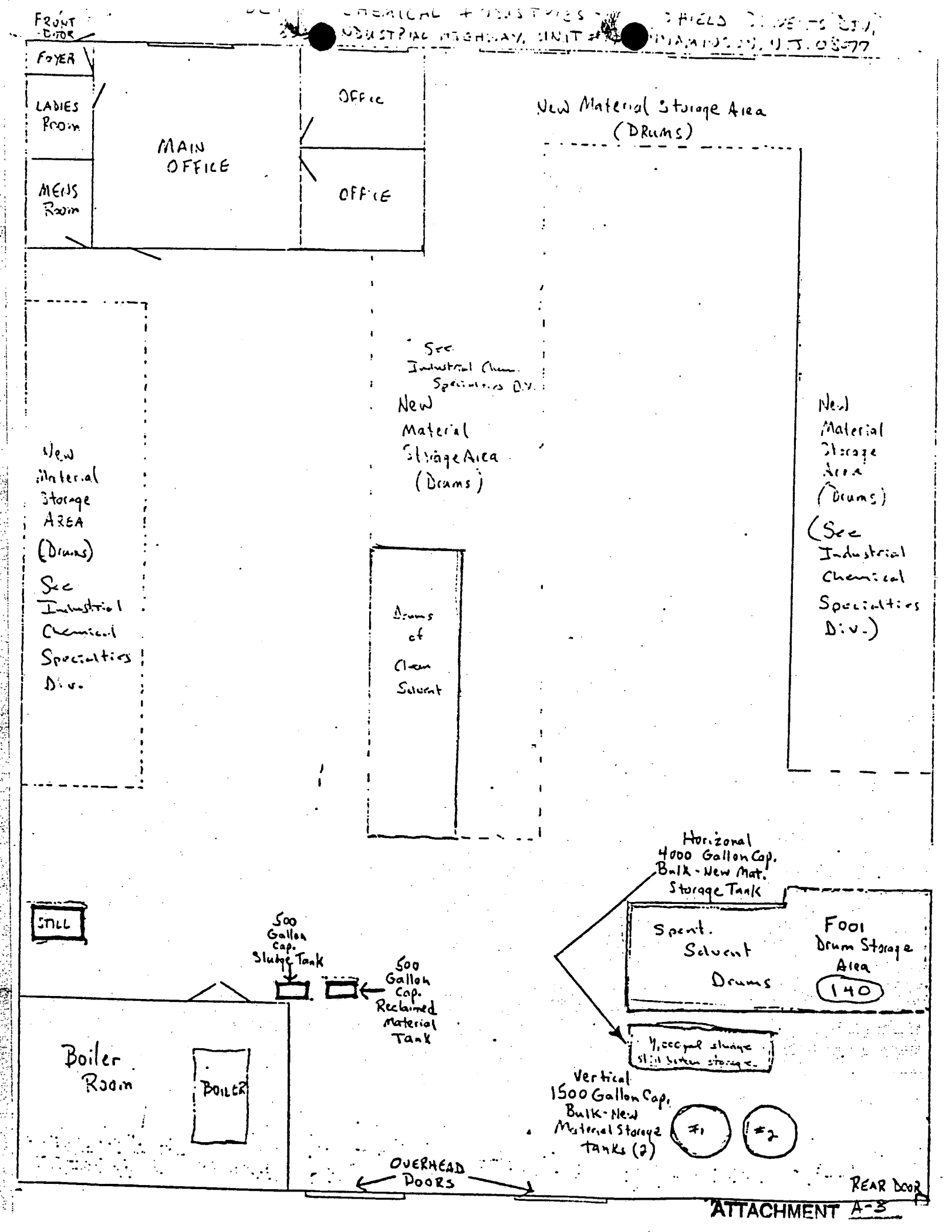
All still bottoms have been sent to RES, Inc. for disposal. Manifests were filled out properly. This co. is registered with the EPA as transporter and as a TSD facility. Mr. Russell explained that he was not registered in NJ as a hazardous waste disposal facility due to the fact that he was under the impression he didn't have to be based on the old regulations. He did have a copy of the proposed regulations, which are not yet in effect. I recommended that he contact Bob Reed to begin registering procedures. Detrex is a NJ registered hauler for special waste, (S-6348).

I communicated at a later date subsequent to this investigation via telephone with Mr. Russell who informed me that Detrex is not entirely a "closed looped" type system. Although this co. does sell clean solvents to various companies, they only pick-up spent solvents from their own customers, (in effect a closed system), to reporcess at their facility in Riverton. The one exception to this case is when Detrex contacts a new customer, they will pick-up and remove old contaminated solvents which they bring back for recycling. This is provided as a service to the new customer and is not Detrex Chem. or Goldshield solvent.

David F. Potts

David F. Potts

ATTACHMENT A-2



ATTACHMENT A-3

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

MEMO

TO Paul Kurisko, Chief, Industrial Waste Management

FROM Surya Shah through William Beggs DATE JAN 27 1983

SUBJECT Detrex Chemical Industries, Inc., Gold Shield Division, 835 Industrial Highway, Cinnaminson, NJ 08077

This section has received aboved mentioned facility's application for Hazardous Waste Facility Permit through Frank Coolick, Chief, Bureau of Hazardous Waste Engineering. I have reviewed the application and found that the facility discharges 0.5% of 1000 gal/day solvent distillation process wastewater to the sanitary sewer. It is stated in the application that all discharging water is via sanitary sewer and there are no storm water sewers on the property. I talked to Mr. Dale Russell of Detrex Chemical to confirm about the cooling water discharge and he stated that they discharge approximately 250,000 gal/quarter into the sanitary sewer.

Based upon above mentioned facts, it is determined that no surface water permit is necessary.

For DPCC/DCR, it is noted from the facility's closure plan that:

Maximum waste in storage = 25,000 gallons

Maximum waste in process = 2,000 gallons

If there is any requirement of DPCC/DCR, it will be taken care by Bureau of Hazardous Waste Engineering.

WQM46:clb

ATTACHMENT B

DETREX CHEMICAL INDUSTRIES, INC.
GOLD SHIELD SOLVENTS DIVISION
835 INDUSTRIAL HIGHWAY, CINNAMINSON, N.J. 08077
609—662-1202 215—925-8257

March 21, 1983

Ernest A. Regna
Chief, Solid Waste Branch
Air and Waste Management Division
U. S. Environmental Protection Agency, Region II
26 Federal Plaza
New York, New York 10278

Re: NJD047318043 - Response to EPA Notice of Violation 3/2/83

Dear Mr. Regna:

In response to the United States Environmental Protection Agency's March 2, 1983 Certified Letter / Notice of Violation, the following steps have already been implemented:

40 CFR 265.16 - Please see attached [2] Job Descriptions and [2] Certifications of Instructions & Training Received.

40 CFR 265.32(a) and 265.34 - An internal communications system between our Hazardous Waste Drum Storage Area and our offices will be operational on or before April 1, 1983.

40 CFR 265.53 - See attached copies of notifications with Certified Mail - Return Receipt's Attached.

Hoping the above measures meet with your approval, I remain,

Cordially,

DETREX CHEMICAL INDUSTRIES, INC.
GOLD SHIELD SOLVENTS DIVISION

Dale S. Russell
Branch Manager

DSR: sp
Enclosures

cc: Chief, Permits Administration Branch, US EPA, NY

DETREX

ATTACHMENT C

Let's protect our earth

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
CN 027, TRENTON, NJ 08625

ORDER

TO: Detrex Chemical Industries, Inc.
835 Industrial Highway
Cinnaminson, New Jersey 08077
Dale Russell, Manager

Contact/Phone: 609-662-1202
Violation Occurred On
Premises Known As:

835 Industrial Highway, Cinnaminson, Lot 5-1, Block 507, Burlington County, New Jersey, ID #45136

The New Jersey Department of Environmental Protection has determined by investigation(s) made pursuant to the provisions of N.J.S.A. 26:2C-1 that on January 10, 1984 you did violate the New Jersey Administrative Code, Title 7, Chapter 27, Air Pollution Control, Subchapter and Section(s) as follows:

17.4(a)1. - The investigation disclosed TVOS (Trichloroethylene) being emitted from a solvent still (N.J.#5, CT-24398) into the outdoor atmosphere with a discharge less than 40 feet (12.2 meters) above grade.

YOU ARE HEREBY ORDERED, to cease violation of said Subchapter on the premises owned, leased, operated, or maintained by you on or before March 15, 1984.

Under the provisions of N.J.S.A. 26:2C-14.1 you are entitled to an administrative hearing if aggrieved by this Order. If aggrieved, you must make written application to the Department within 15 days from receipt of this Order.

Should you have any questions, contact Southern Field Office
609-795-7390
Refer to Log #21549

Dated: January 26, 1984

Thomas A Pluta
Thomas A. Pluta, Assistant Director
Enforcement Branch

Program: Southern Field Office

CERTIFIED MAIL

RECEIVED
JAN 30 1984
N.J. STATE DEPT. OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY

ATTACHMENT DEL

Form DEQ-012
5/81

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY

AIR POLLUTION CONTROL CODE

FIELD RECORD OF VIOLATION

DATE 1/10/84 TIME AT SITE 9:00 (a.m.) p.m. *from* 10:00 (a.m.) p.m. *to*

STATE HEALTH DISTRICT Southern COUNTY Burlington

Sec. A — PERSON IN VIOLATION

FULL BUSINESS NAME DETREX Chemical Ind. Inc. ID# 45136

MAILING ADDRESS 835 *No.* Industrial Hwy. *Street* Cinnaminson *City* 08077 *Zip Code*

TYPE OF OWNERSHIP: ☐ Individual ☐ Partnership ☒ Corporation ☐ Municipal _____ *Type*

NAME OF OWNER, PARTNERS, OFFICERS, OFFICIALS Dale Russell

TITLE MANAGER

PERSONS INTERVIEWED Dale Russell

PERSON AUTHORIZED TO RECEIVE PROCESSES _____ *Name*

MAILING ADDRESS _____ *No.* _____ *Street* _____ *City* _____ *Zip Code*

REMARKS: Phone # (609) 662-1202

Sec. B — LOCATION OF VIOLATION

LOCATION ADDRESS 835 *No.* Industrial Hwy. *Street* Cinnaminson *City*

(Show details on reverse side) Book Plate _____ Lot 5-1 Block 507

PREMISES OCCUPIED AS: ☐ Owner ☐ Lessee ☒ Tenant

OWNER _____ *Name* _____ *Street* _____ *City*

Sec. C — DETAILS OF VIOLATION

CODE REFERENCE: Chapter(s) 27 Section(s) 17.4 Paragraph(s) (a) 1

DETAILS The Subject Company operated Equipment which Exhausted Trichloroethylene (a T.V.O.S.) from a Stack which was less than 40 feet Above grade. Namely The Solvent Still listed under N.J.#5, CT#24398 was operated and seen in the process of distilling Trichloroethylene and Exhausting Emissions from this source to a stack which was 29 feet above grade.

REMARKS The Company desires to come under an A.C.O. with D.E.P.

RECOMMENDED ACTION Issue an Order

SIGNED: Lauren C. Nelson Jr. OK fm 1/17/84 TITLE: Sr. Environmental Specialist

DC 1/18/84

(OVER)

ATTACHMENT D-2

91

12480

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN FITCH PLAZA, P.O. BOX 1390, TRENTON, N.J. 08625
Division of Environmental Quality

ORDER

To:
Detrex Chemical Industries
Corporation Trust Co., Registered Agent
15 Exchange Place
Jersey City, New Jersey 07302
and
Whitesell Construction Inc.
Thomas R. Whitesell, Registered Agent
2601 Broad Street
Cinnaminson, New Jersey 08077

Re: Air Pollution Control Code
See attached cross reference sheet
VIOLATION OCCURRED ON PREMISES KNOWN AS:
835 Industrial Highway, Block 507, Lot 5-1, Cinnaminson Township, Burlington County, New Jersey

Dear Sir:

WHEREAS, the State Department of Environmental Protection has determined by investigation(s) or inspection(s) made pursuant to the Provisions of the New Jersey Air Pollution Control Act, that on ~~April 13, 1976~~ you did violate Chapter 27, Section(s) 7:27-8.3(a) & (b), of the New Jersey ~~Air Pollution Control~~ Administrative Code. (see paragraph(s) A & B below).

NOW THEREFORE, YOU ARE HEREBY ORDERED to cease violation of said Chapter on premises owned, leased, operated or maintained by you on or before ~~July 13, 1976~~.

A CHAPTER 9, SECTION 3.1: The investigation(s) disclosed that a new exhaust system servicing 2 storage tanks & 2 stills was constructed, installed or altered on the premises identified above without first having obtained a "Permit to Construct, Install or Alter Control Apparatus or Equipment" from the Department.

B CHAPTER 9, SECTION 3.2: The investigation(s) disclosed that ~~a new exhaust system servicing 2 storage tanks & 2 stills~~ was used or caused to be used on the premises identified above without first having obtained a "Certificate to Operate Control Apparatus or Equipment" from the Department.

C CHAPTER 10, SECTION 2.1: The investigation(s) disclosed the storing, offering for sale, delivering for use or use of Grade # _____ commercial fuel oil on the premises identified above containing sulfur in excess of _____% by weight

D CHAPTER 10-A, SECTION 2.1: The investigation(s) disclosed the storing, offering for sale, sale, or delivering for use in New Jersey of bituminous and/or anthracite coal on the premises identified above containing sulfur in excess of 0.2% by weight (dry basis).

E CHAPTER 10-A, SECTION 2.2: The investigation(s) disclosed the use of bituminous and/or anthracite coal on the premises identified above containing sulfur in excess of 0.2% by weight (dry basis)

F CHAPTER 10-A, SECTION 2.6: The investigation(s) disclosed the offering for sale, sale, delivering for use, or use in New Jersey, coke on the premises identified above containing sulfur in excess of 0.65 percent by weight

Dated ~~May 14, 1976~~

Herbert Wortreich
Herbert Wortreich, ~~XXXXXX~~ Director
Chief
Bureau of Air Pollution Control

cc: Board of Health: Burlington County
State Health District: Central
Copy For:
Certified Mail

(OVER)

ATTACHMENT D-3

Apr. 67

NEW JERSEY STATE DEPARTMENT OF HEALTH

NEW JERSEY AIR POLLUTION CONTROL CODE
FIELD RECORD OF VIOLATION

DATE 4/13/76 TIME AT SITE 10:00 a.m. (from) ~~p.m.~~ 11:10 a.m. (to) ~~p.m.~~

STATE HEALTH DISTRICT CENTRAL COUNTY BURLINGTON

Sec. A — PERSON IN VIOLATION

FULL BUSINESS NAME DETREX CHEMICAL IND., GOLD SHIELD SOLVENTS DIV.

MAILING ADDRESS 835 (No.) INDUSTRIAL HWY (Street), CINNAMINSON (Post Office) 08077 (Zip Code)

TYPE OF OWNERSHIP:	NAME OF OWNER, PARTNERS, OFFICERS, OFFICIALS	TITLE
Individual		
Partnership		
Corporation ✓		
Municipal (type)		

Person(s) interviewed MR. THOMAS J. CULLEN, BRANCH MANAGER
DORIS SMITH SECRETARY

Person authorized to receive processes _____ (Name)

MAILING ADDRESS _____ (No.) (Street) (Post Office) (Zip Code)

REMARKS: _____

Sec. B — LOCATION OF VIOLATION

LOCATION ADDRESS 835 (No.) INDUSTRIAL HWY (Street) UNIT #1 CINNAMINSON (Municipality)

(Show details on reverse side) Book Plate _____ Lot 5-1 Block 507

Premises occupied as: Owner _____ Lessee ✓ Tenant _____

Owner WHITESELL CORP. (Name) 2601 (No.) BROAD ST (Street) CINNAMINSON (City) 08077

Sec. C — DETAILS OF VIOLATION

CODE REFERENCE A.R.C. Chapter(s) 7:27 Section(s) 8.3 Paragraph(s) (a) & (b)

DETAILS: COMPANY DID INSTALL AND OPERATE A NEW (INSTALLED MARCH 1976) VENTILATION SYSTEM FOR THE (2) STORAGE TANKS AND (2) STILLS PRESENTLY COVERED BY FOLLOWING:

P-9453 CA-7656 SOLVENT STORAGE
P-9454 CA-7657 SOLVENT STORAGE
P-9455 CA-7658 SOLVENT STILL
P-9456 CA-7659 SOLVENT STILL

REMARKS NO ADDITIONAL CONTROLS ARE REQUIRED

RECOMMENDED ACTION ORDER

David C. Daly
Signed

Sr. Environ. Tech
Title

(OVER)

ATTACHMENT D-4

NJD 00253

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
120 Rt. 156, Yardville, N.J. 08620

DR. MARWAN M. SADAT, P.E.
DIRECTOR

LINO F. PEREIRA
DEPUTY DIRECTOR

FEB 21 1984

IN THE MATTER OF
Detrex Chemical Industries Inc.

ADMINISTRATIVE
ORDER

The following FINDINGS are made and ORDER is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (Department) and duly delegated to the Assistant Director for Enforcement and Field Operations, Division of Waste Management, under the Solid Waste Management Act, N.J.S.A. 13:1E et seq.

FINDINGS

1. The New Jersey Department of Environmental Protection (hereinafter "the Department") has determined that Detrex Chemical Industries Inc. is acting as a transporter of hazardous waste (EPA Identification Number NJD047318043) and as a treatment, storage, or disposal facility (EPA Identification Number NJD047318043), located at 835 Industrial Highway, Lot 5.1, Block 507, Cinnaminson Township, Burlington County, New Jersey.

2. During an inspection by a Departmental representative on June 8, 1983 of the above stated facility, the New Jersey Hazardous Waste Manifests, NJ0101321 and NJ0101318, were observed.

3. The above stated manifests indicated that Detrex Chemical Industries Inc. acting as the transporter, accepted hazardous waste from two generators, Electroid Corporation and Major Automotive Products Co. Inc., who failed to properly complete said manifests, specifically the EPA Identification Number for both generators were missing from both manifests. This being a violation of N.J.A.C. 7:26-7.5(g)2.

4. Furthermore, Detrex Chemical Industries Inc., acting as the treatment, storage, or disposal facility, accepted hazardous waste shipments from two generators, Electroid Corporation and Major Automotive Products Co. Inc., which were accompanied by improperly completed manifests. This being a violation of N.J.A.C. 7:26-7.6(a)2.

ATTACHMENT E

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
JOHN FITCH PLAZA, CN027, TRENTON, N.J. 08625

May 4, 1984

- LEGAL FILE

Mr. Dale Russell
Branch Manager
Detrex Chemical Industries, Inc.
835 Industrial Highway
Cinnaminson, New Jersey 08077

Reference: Gold Shield Solvents Division, Cinnaminson, New Jersey
New Jersey Administrative Code 7:27-17.4(a)1 dated January 26, 1984
Order #21549

Dear Mr. Russell:

This is in response to your request for written confirmation that the solvent reclamation system has achieved compliance with the referenced Order.

During the recent inspection conducted by Mr. Marvin C. Makler of the Central Field Office, the system was observed in use and determined to be meeting the requirements of the referenced Order. The system also appears to meet all the other requirements of N.J.A.C. 7:27-17.1 et seq.

The Department appreciates the prompt action taken by the corporation to install an acceptable control device and associated equipment which is expected to resolve this matter.

Sincerely,

Allan T. Edwards

Allan T. Edwards, Chief
Bureau of Enforcement Services

ds

c: Robrect
CFO

ATTACHMENT F

REPORT OF PUBLIC HEARING

THE APPLICATION BY GOLD SHIELD DIVISION OF DETREX CHEMICAL INDUSTRIES, INC. TO OPERATE A WASTE CHLORINATED SOLVENT TREATMENT, TRANSFER AND STORAGE FACILITY; CINNAMINSON, NEW JERSEY.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT

1984

ATTACHMENT B-1

I. Introduction

On October 30, 1984, a public hearing was held in Cinnaminson, New Jersey to receive testimony on the draft Hazardous Waste Facility Permit for The Gold Shield Division of Detrex Chemical Industries, Inc. Public notice for the hearing was published in the September 18, 1984 issue of the Burlington County Times, and September 19, 1984 issue of the News Weekly. The facility is engaged in the distribution, recycling and recovery of chlorinated solvents. Gold Shield is located at 835 Industrial Highway in Cinnaminson, New Jersey. This hearing was provided in accordance with the New Jersey Administrative Code, Subsection 12.12.

Gold Shield will accept and store for transfer, to an authorized off-site treatment, storage and disposal facility, the following spent chlorinated solvents: 1,1,1, Trichloroethane, Methylene Chloride, Perchloroethylene, Trichlorotriflouroethane, and Trichloroethylene. Gold Shield will accept, store, and treat the following spent chlorinated solvent: Trichloroethylene. Treating or recycling of Trichloroethylene will be accomplished by use of one steam-heated, water-cooled chlorinated solvent distillation unit. Maximum container storage of hazardous waste shall not exceed 16,500 gallons (300-55 gallon containers). Tank storage of hazardous waste shall be limited to three tanks: a 500 gallon spent solvent feed tank, a 550 gallon distillate storage tank, and a 4,000 gallon still bottom storage tank. The operations are not being expanded, no new wastes will be received and no modifications are proposed.

Gold Shield has been operating at their present location since 1972. At that time, no hazardous waste regulations existed to require Gold Shield to obtain a permit prior to commencement of operations. The New Jersey Hazardous Waste Regulations became effective in October 8, 1981 and hence an Administrative Consent Order was issued to Gold Shield on October 6, 1981. This allowed Gold Shield to continue present operations until a Part A and B permit application is submitted and a final decision is rendered whether to issue or deny a Hazardous Waste Facility Permit.

The Report of Public Hearing deals with oral testimony received at the Public Hearing on October 30, 1984 and written comments received by the Department on various dates. The Department has completed its review of testimonies concerning Gold Shield's spent chlorinated recycling facility. These issues have been presented here by the Department.

II. Oral and Written Testimonies from the Public

The questions, comments, and suggestions regarding the Gold Shield spent chlorinated solvent recycling and storage facility have been addressed by the Department and are presented here.

Ten comments were received concerning the applicability of the "Siting Criteria for New Major Commercial Hazardous Waste Facilities" to Gold Shield. It was questioned whether, by passing the criteria, Gold Shield could be allowed to expand operations beyond the minimum storage volume criteria.

The Siting Criteria consist of seven subsections used to prevent any significant threat to human health or the environment. The first subsection, N.J.A.C. 7:26-13.7, establishes standards to protect the population of the State. Specifically, 13.7(a)2 reads "No new major commercial hazardous waste facility other than land emplacement or impoundment type facilities shall be sited within one-half mile of any structure which is routinely occupied by the same person or persons more than 12 hours per day, or by the same person or persons under the age of 18 for more than two hours per day".

This means that Gold Shield would fail the first criteria because of its location relative to area residences; as this criteria tries to define a privately owned home or rented dwelling.

Therefore, if Gold Shield were to attempt to expand present operations, the siting criteria would essentially prohibit expansion beyond the minimum storage volume provided in the definition of a Major Hazardous Waste Facility. A facility is not Major unless it has the capacity to treat, store or dispose of more than 250,000 gallons of hazardous waste.

Additionally, Gold Shield cannot expand present operations unless a request for expansion is submitted to the Department along with a justification, and the Department approves the expansion. The process and ultimate decision would involve permit modification or a revocation and reissuance of the permit, subject to public comment and a public hearing. Gold Shield presently has sufficient space limitations where expansion of operations is unlikely.

The conclusions expressed in the siting criteria evaluation, especially for section 13.7, are based on the fact the Gold Shield currently employs a State-of-the Art air pollution control device. The device is a Carbon Adsorber which filters the Trichloroethylene emissions. Emission plume modeling and expectant ground level concentrations are discussed later in this report.

As Gold Shield is not a Major Facility, The New Jersey Hazardous Waste Facilities Plan does not apply whether the plan is finalized or not. No tax will be imposed on Gold Shield as required under the plan. The Siting Criteria is adopted and finalized. It is policy of the Department to apply the Siting Criteria to each and every facility that has a prepared draft permit.

Seven comments were received concerning where the wastes are coming from, how are they handled, and where is the ultimate disposal site for sludges and still bottoms.

Gold Shield accepts waste chlorinated solvents from facilities primarily involved in steel, stainless steel, and aluminum cutting operations. The solvents are used in vapor degreasing of these metals. The waste solvents will normally contain cutting oils, grease and grit. The potential for contamination of foreign toxic materials in the waste solvent is very unlikely. Waste solvents are placed in 55 gallon containers for transport

back to Gold Shield. The containers are constructed of carbon steel with approved Department of Transportation Specification 17E. Seventy five percent of the generators come from New Jersey while the remaining are from Pennsylvania, New York, and Connecticut.

Sludges and Still Bottoms generated by Gold Shield are stored on the premises in either a 4,000 gallon carbon steel tank or other 55 gallon carbon steel containers. Sludges and Still Bottoms are removed off-site for high temperature incineration at Rollins Environmental Services, Bridgeport, NJ. Rollins is currently authorized by the NJDEP to incinerate these wastes. The wastes are removed approximately every other month by Rollins' vehicles or by S.J. Transportation. The transportation vehicle may be a tank truck with a bulk holding capcity up to 5,000 gallons or a flat bed trailer for drum removal. Each shipment is accompanied by a manifest to ensure the wastes are received by Rollins.

Six comments were received concerning on-site inspections of Gold Shield by the Department.

Gold Shield is inspected every other week by personnel of the Bureau of Field Operations, Division of Waste Management, New Jersey Department of Environmental Protection. Facility inspections began July 17, 1981 which is a date before the New Jersey Hazardous Waste Regulations became effective. All inspection reports are available for public review. In order to review an inspection report, a written request shall be sent to the Red Lion Field Office, Rt. 70, RD #1, Vincentown, New Jersey, 08088.

If a violation of operating procedures is noticed during the inspection, it must be corrected immediately. Violations requiring longer correction periods will be followed-up by another inspection to ensure the situation is rectified. To date, Gold Shield has not had any violations that would endanger human health or the environment.

Nine comments were received concerning the hazardous nature of waste solvents relating to fires and explosions, and combating such circumstances.

All waste solvents accepted by Gold Shield are not flammable. Trichloroethylene is the only solvent to approach the flammability limit as defined in The National Fire Protection Association Codes and Standards.

In the event of a fire within the premises, waste or product solvents would not be expected to burn. Because of their non-flammability the solvents can not fuel a fire. A fire cannot spread from solvent container to solvent container or tank.

Should fire fighters enter Gold Shield to combat a fire, a NIOSH/MSHA pressure-demand, self-contained breathing apparatus should be worn. These apparatuses are a part of any properly equipped fire department and are used in most fire fighting situations. Water, dry chemicals and carbon dioxide can be used on any fire at Gold Shield. Other safety equipment should include a face shield, safety glasses and neoprene protective

clothing. No short-term health effects should be experienced by a fire fighter that properly uses the necessary fire fighting equipment.

Gold Shield's on-site fire fighting equipment includes portable fire extinguishers located throughout the facility and an automatic sprinkling system within the building. .The building has a fire alarm and emergency communications equipment to notify all personnel and the local fire company in the event of a fire. A self-contained breathing apparatus and chemical respirators are available, if necessary. A Contingency Plan is available which provides emergency phone numbers and instructions for the Emergency Coordinator in the event of an emergency.

Gold Shield is located at the end of a warehouse complex. The walls separating the tenants are constructed of concrete cinder-blocks. As a fire would not penetrate such barriers, the operations of Gold Shield's neighbors should not affect the facility.

Four comments were received concerning spills within and outside the plant, spills associated with transport vehicles, and use of the containment system.

Gold Shield's container storage area consists of a concrete base that has a three inch peripheral curbing and no floor drains. This containment area is designed to contain over 50 percent of the maximum allowable hazardous waste storage. N.J.A.C. 7:26-10.4 specifies a minimum capacity of a least 10 percent.

Although the containment system does not have capacity for all containers of hazardous waste; the Department is of the opinion that short of a major disaster, it is unlikely that more than a few containers would be damaged or spilled at any given time or simultaneously begin to leak. As stated previously, the waste solvents are not flammable or reactive and therefore the possibility of the materials to react to cause explosions or fires would be minimal. A spill overflowing the dikes could never contain enough volume to run-off to sanitary or storm sewers. The area immediately adjacent to Gold Shield is a paved parking area with sufficient holding capacity by itself.

A spill experienced during transportation must be cleaned and removed by the responsible individual(s), although actual spill cleanup may be performed by a special contractor. The Department maintains an up-to-date list of authorized spill cleanup contractors. Response time for a spill can be very short, allowing enough time for a vacuum truck to arrive and retrieve the spilled material. Small spills are usually absorbed by means of suitable absorbent such as vermiculite and then containerized for disposal. Contaminated earth is also removed for disposal.

The cleanup and removal of spills by individuals with no financial resources and spills by unknown sources is paid through the New Jersey Spill Control and Compensation Fund.

Six comments were received concerning liability insurance and closure care requirements.

Gold Shield currently maintains liability insurance at $1 million per occurrence/$2 million annual aggregate in the form of a Financial Test in accordance with N.J.A.C. 7:26-9.13. To pass the financial test, Detrex Chemical Industries, Inc., the parent company of Gold Shield, has demonstrated a net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test; and tangible new worth of at least $10 million; and assets in the United States amounting to at least six times the amount of liability coverage to be demonstrated by this test.

The financial test must be updated within 90 days after the close of each succeeding fiscal year by sending the following information to the Department:

1. A letter signed by the owner's or operator's chief financial officer and worded, as specified in N.J.A:C 7:26-9 (Appendix A).

2. A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.

3. A special report from the owner's or operator's independent certified public accountant to the owner or operator stating that:

   a. He has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

   b. In connection with that procedure, no matters came to his attention which caused him to believe that the specified data should be adjusted.

With regard to closing the facility, Gold Shield has and maintains a Performance Bond and Standby Trust Fund in the event monies are needed to remove all waste and decontaminate equipment. Under normal closure proceedings, Gold Shield would remove all waste and decontaminate equipment at their expense. However, should Gold Shield vacate the premises or go bankrupt, the Performance Bond and Standby Trust Fund would be implemented to provide for proper closure. The Performance Bond and Standby Trust Fund cannot be absolved in the event of bankruptcy or financial foreclosure. The amount of the Performance Bond is the amount of the closure cost estimate.

Three comments were received concerning whether Gold Shield affects ground water.

As discussed previously, Gold Shield employs a diked, concrete storage area for hazardous wastes. Spills will be contained within this area, and there are no floor drains. A completely catastrophic and extremely unlikely

event would be necessary in order for wastes to overflow the diked area to the outside. Should this happen, the asphalt parking area has a natural relief to contain substantial quantities of material. Hazardous wastes do not have the routes to affect ground water as there is complete containment and no exposed earthen surfaces.

Spills occurring during transportation may obviously release materials to earthen surfaces where ultimate ground water contamination would occur if left there for extended periods of time. However, spills are routinely cleaned up within hours of the accident and contaminated soils are removed to prevent any migration of material to the ground water.

Several comments were received concerning vehicular traffic patterns and volume, vehicle requirements, and how the materials are handled.

Waste solvents are transported to Gold Shield in 55 gallon steel drums by a licensed New Jersey Hazardous Waste Hauler. Each shipment must be accompanied by a manifest as required by N.J.A.C. 7:26-7.4.

The Hauler must also possess a valid New Jersey Hazardous Waste Hauler License and comply with all provisions of N.J.A.C. 7:26-7.5. The 55 gallon steel drums must be in compliance with all applicable NJDEP and NJDOT container regulations.

To obtain and possess a New Jersey Hazardous Waste Hauler License, the hauler must comply with the following:

a. The vehicle be registered and inspected yearly by the New Jersey Department of Transportation.

b. The hauler never be convicted of any criminal offense under state or federal law for acts or omissions involving the illegal handling, storage, transportation, processing, or disposal of hazardous waste or for transactions involving hazardous waste.

c. All transporter employees handling hazardous waste successfully complete a program of instruction that teaches them to perform their duties in a way that ensures the transporter's compliance with the New Jersey Hazardous Waste Regulations.

d. Comply with minimum financial responsibility requirements covering public liabilities, property damage and environmental restoration set out in Section 30 of the Federal Motor Carrier Act of 1980 (23 USC 315) and 40 CFR 387 as adopted. Minimum financial liability coverage is establish at one million dollars per occurrence.

All containers used to transport hazardous waste are to be in conformance with the construction type and labeling requirements of the United States Department of Transportation concerning hazardous material containerization (49 CFR 171-49 CFR 179). Container requirements of N.J.A.C. 7:26-7.2 also need to be complied with.

The waste generated by Gold Shield is primarily transported from the premises in bulk-form while some waste may be in 55 gallon containers. A tank or vacuum-truck of approximately 5,000 gallon capacity transports the bulk-waste off-site. Again, this transporter must possess a New Jersey Hazardous Waste Hauler Licence.

Hazardous waste shipments to and from Gold Shield occur on a very regular basis. For waste generated by Gold Shield, a single load is shipped every two months. Wastes transported to Gold Shield are shipped once daily in a vehicle which is owned and operated by Gold Shield. If waste operations did not exist, Gold Shield would still have a vehicle transport product solvent once or twice daily.

Vehicular accidents involving transporters of waste to or from Gold Shield is not likely to cause fires or explosions resulting from the contents carried. As discussed previously, the solvents are not flammable and will not ignite. Spills resulting from an accident is addressed previously in the section concerning spills.

One commenter inquired about the Administrative Consent Order and its expiration date.

On October 6, 1981, the Department issued an Administrative Order to Gold Shield Solvents, Inc. to register as a Solid Waste Facility pursuant to Hazardous Waste Management Act. N.J.S.A. 13:1E-1 et seq. and apply for a permit pursuant to N.J.A.C. 7:26-1 et seq. On February 15, 1982, Gold Shield submitted a Part A and B application to the Department for a permit to operate as a hazardous waste facility. On September 14, 1982, the Department issued an Administrative Consent Order (ACO) to Gold Shield authorizing operation subject to N.J.A.C. 7:26-12.3 and the ACO. The ACO remains in effect pending a final decision by the Department to issue or deny a Hazardous Waste Facility Permit or a Departmental finding of violation of the ACO.

A comment was raised concerning the reliability of the safeguards employed and not just how they related to Gold Shield, but use by other facilities as well.

The use of secondary containment systems, container and tank management practices, security and emergency equipment, waste analysis, personnel training, and other similar guidelines are all an integral part of a facility's hazardous waste management plan. These operational requirements are established by the New Jersey Hazardous Waste Regulations, N.J.A.C. 7:26-1.1 et seq., to ensure that each waste is stored, treated, or disposed in the safest and most technically viable manner. Hazardous waste management practices utilized are site specific, and hence, vary between each hazardous waste facility. As each facility is subject to the same set of applicable operational and design standards, it can be assured that safe operations is their primary focus.

A commenter questioned the benefits of Gold Shield to the community.

Although there may be no direct benefit of having Gold Shield in one

location or other, the benefit of having Gold Shield exist is that many home use and personal items would not be manufactured without the solvents that Gold Shield supplies. The general population is dependent on many conveniences and necessities on a daily basis. To provide these needs, industry must convert a raw material into a final product. This production of foods, clothing and the thousands of other items used by the American public may have its shortfalls; but with proper management and technology, they can be controlled so that the public can live with the benefits as well as the benefactors.

A question was raised concerning the number of Hazardous wastes facilities in New Jersey today.

There are approximately 290 hazardous waste treatment, storage, or disposal facilities and approximately 2,300 hazardous waste generators in New Jersey today.

One comment suggested that Condition 8 (Duty to provide information) of the draft permit should allow the local government to have access to information.

The hazardous waste facility permit is being issued under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act. The regulations promulgated pursuant to this act gives specific authorization to representatives of the Department of Environmental Protection to enter onto the property of a regulated unit. These regulations also give the Department the authorization to require that records be submitted to the Department in order to determine permit compliance. This authorization is not extended to local or county officials.

A question was raised concerning the hours of operation of Gold Shield.

Gold Shield works on a 8-hour day, 5 days a week schedule. Occasionally, extended hours may be necessary, usually limited to two or three extra hours.

One commenter was concerned that the materials handled by Gold Shield are bacterial mutagens and if so, what does that mean.

Trichloroethylene may be a bacterial mutagen, in some species, particularly when it is partially broken down. Mutagens are substances that cause changes in a cell's DNA. Most mutations are "silent", that is they cause no noticeable changes in the cell. Some are lethal and may kill a cell by rendering it unable to perform some vital function. Finally, a few mutations may be beneficial. Among bacteria, this generally means allowing them to utilize what's available more efficiently.

Bacterial mutagenicity is generally determined through the Ames test. In the Ames test, mutant bacteria are used which cannot manufacture a substance which is vital to survival (histidine). They can survive if histidine is provided in their environment. The bacteria are placed on an agar plate, without histidine, therefore they cannot reproduce. A suspected mutagen is put on the plate. If it causes mutations, it will cause some of the bacteria to mutate allowing them to produce their own

histidine. These mutant bacteria will grow and produce colonies which are visible. Statistically, there is considered to be a correlation between mutagenicity and carcinogenicity.

Several questions were directed toward the Planning Board of Cinnaminson concerning zoning considerations and restrictions.

The Department recommends to consult the Planning Board directly with regard to zoning restrictions and other related issues.

Several questions were raised concerning how Gold Shield will affect property value.

The Department cannot answer this concern as it is subject to many different variables.

Several questions were raised concerning the building the Gold Shield occupies and its ultimate ownership.

Gold Shield has been leasing Unit #1 since 1972. The building owner has no other affiliation with Gold Shield than a lessor-lessee arrangement.

Information was presented at the Public Hearing about the parent company Detrex Chemical Industries, Inc. and their involvement with various lawsuits.

Detrex Chemical Industries, Inc. has assured the Department that none of the present lawsuits pending against the company result in allogations relating to hazardous waste or environmental contamination. The primary claim against the company involves product use liabilities. Moreover, the Department has conducted a full review of Gold Shield's disclosure statement (required by N.J.A.C. 7:26-12.2(h)) and determined that the company is reliable and competent to conduct business in hazardous waste management.

Several questions were presented concerning evacuation plans for employees of Gold Shield and area residents.

Gold Shield does have an evacuation plan for employees should a situation warrant evacuation of the premises. An evacuation plan does not exist for area residents. Due to the nature of materials handled by Gold Shield, an evacuation plan for area residents is not warranted. However, should an evacuation plan be necessary, it would simply require individuals to stay away from the area in the event of an emergency. Further concerns may involve avoiding smoke or fumes downwind in the event of a fire.

A question was raised whether the Division of Water Resources should be involved with Gold Shield regarding applicable permits or other concerns.

Gold Shield does not have any wastewater discharges subject to regulation by the Division of Water Resources. The only discharge is a sanitary sewer line to the local sewage authority; this discharge does not contain any process waste.

A suggestion was presented regarding the placement of a monitoring or an alarm-type system on the outside of the building to indicate any problems occurring inside the building.

The Department feels that due to the nature of operations and materials handled, an elaborate system to indicate certain situations within the building is not necessary.

A question was raised as to the proximity of Gold Shield to flood plains.

Gold Shield is not located within a 100-year flood plain. In fact, the flood plain is approximately fifteen feet in elevation below the premises Gold Shield occupies.

A question was presented regarding whether a recourse to the air discharge permit is possible.

The Bureau of Air Pollution Control does not normally provide public comment periods or public hearings on new air permits, but should substantial opposition be presented regarding a specific site, a public hearing may be held. Comments on permits already issued (such as Gold Shield) may be presented to following individual:

Allan Edwards, Chief, Bureau of Enforcement Services
Division of Environmental Quality
CN 027
Trenton, NJ 08625

An air permit may only be revoked if the permittee is not in compliance with the conditions of the permit or the applicable regulations under Title 7, Chapter 27 of the New Jersey Administrative Code. Therefore, comments to the above individual must present situations of non-compliance for consideration of revocation and/or reissuance of the air permit.

A question was raised concerning the involvement of other agencies such as OSHA.

Gold Shield is routinely inspected by OSHA personnel for employee health and safety concerns. The Department is not aware of the specifics of OSHA inspections or areas of jurisdiction. The regional OSHA office should be contacted directly if certain issues need to be addressed.

A comment was raised concerning all potential emissions from the exhaust stack and their resultant compounds when mixed in the atmosphere.

The exhaust system at Gold Shield will only draw Trichloroethylene and 1,1,1 Trichloroethane vapors from storage tanks and process equipment. Gold Shield has a fully approved air permit for this exhaust system, issued by the Division of Environmental Quality. Compliance is maintained with all applicable New Jersey State air emission regulations.

These compounds may slowly decompose in the atmosphere to form hydrochloric acid. This occurs during contact with water vapor and is enhanced in the presence of sunlight. No sulfur oxides, nitrous oxides, or particulate emissions can be expected as no combustion occurs with the solvents. As indicated later in this report, the emission concentrations actually emitted are extremely low, leaving the potentially resultant compounds unmeasurable in the atmosphere.

Several comments were presented concerning the exhaust stack emissions, air pollution unit, and whether alarm or monitoring devices exist on the unit.

The emission control and monitoring system employed at Gold Shield combines state-of-the-art technology with a professionally engineered exhaust system to remove chlorinated hydrocarbon vapors from the air exhaust from the facility.

The system consists of an 18 inch main exhaust duct in which all vapors emitted from process equipment are collected. The exhaust gases are passed through a Detrex Model SA-3000 Dual Bed Carbon Adsorber. Each bed contains 700 pounds of activated carbon.

The carbon adsorber is furnished with electronic controls which allow it to operate automatically. The unit will remove solvent vapors from the exhaust by passing the exhaust through one bed while at the same time be regenerating the other bed. Regeneration is accomplished by steam stripping the solvent off the saturated bed and condensing the vapors, allowing for recovery of the solvent. When only water appears in the separator, regeneration is complete and the bed of carbon is ready for use.

Once passed through the bed of carbon, the air is then exhausted through an 18 inch duct and emitted to the atmosphere 44 feet above grade at a velocity of 3,500 feet per minute. The exhaust is then mixed with the atmosphere.

Although the carbon adsorption unit operates automatically, an exhaust gas monitor is installed on the discharge duct to allow for monitoring of the chlorinated hydrocarbon content in the exhaust stream. The monitor, ENMET Model ISA-44 Hazardous Gas Monitor, has a probe located in the discharge exhaust duct with the readout meter located at an easily accessible location in the facility. The monitor allows for continuous monitoring of the concentration of solvent contained in the exhaust stream. When the concentration reaches 75 ppm, a yellow light is activated. At 100 ppm, a red light and horn (at 104 decibels) is activated. At such time, the bed being used is considered saturated and must be regenerated. The second bed which was previously regenerated is then utilized, allowing for regeneration of the saturated bed. As Gold Shield operates in this manner, plant emissions will not exceed a level of 100 ppm.

Several comments were received concerning exhaust stack emission rates relating to the resultant downwind concentrations and its effect on the health of area residents.

Two studies were conducted to evaluate the exhaust stack emission rates and its effect on the ambient air quality within the vicinity of Gold Shield. The New Jersey Department of Environmental Protection, Division of Environmental Quality ran air modelling computer programs to determine the expectant maximum downwind concentrations of Trichloroethylene and/or 1,1,1 Trichloroethane based on the physical operating parameters of Gold Shield's air exhaust unit. Further investigations were managed by the Burlington County Health Department for response to the Cinnaminson Township Board of Health. Their investigations occurred at the Gold Shield facility and a comprehensive report followed.

The air modelling programs provided an estimated long-term annual average maximum concentration and a short-term peak concentration. The estimates assume a constant wind direction and speed, with the air exhaust unit operating continuously at maximum solvent vapor throughput. Estimated values provide a worst-case scenario yet these conditions should never exist. Gold Shield operates the air exhaust unit on an average of five hours a day, three to four days a week.

The long-term annual average maximum concentration was estimated at 2.9 ug/m^3 (0.00055 parts per million, ppm) trichloroethylene/1,1,1 trichloroethane mixture at 300 meters downwind from the source. The short-term peak concentration (duration from ten minutes to one hour in a twenty-four hour period) was estimated at 113 ug/m^3 (0.02 ppm) trichloroethylene/1,1,1 trichloroethane mixture at 300 meters downwind from the source.

The Burlington County Health Department performed tests at Gold Shield to determine ambient air conditions both outside and within the general structure of the facility with a Total Volatile Organic detector and a stack test for Trichloroethylene of the influent and effluent gas stream with a toxic gas detection unit. Results of their testing disclosed that ambient air conditions upwind and downwind from the stack were a constant three to five P.P.M. total volatile organics with no detectable impact. Results from sampling within the facility were from five to fifteen P.P.M. total volatile organics in the warehouse area, and seven to eight P.P.M total volatile organics within the office portion of the facility. Stack testing results revealed a 200 P.P.M. influent trichloroethylene level and a non-determinable trichloroethylene effluent quality equating to a removal efficiency of not less than 97.5%.

To evaluate potential public health risks associated with the solvent vapor emissions at Gold Shield, the 0.02 ppm trichloroethylene value will be compared. Presently human toxicological studies for inhalation of trichloroethylene at this low concentration have not been performed or are at least not confirmed. The best available data to correlate health risks to the maximum estimated ground level concentration is by use of OSHA permissible exposure limits (29 CFR 1910.1000). These limits are established for employee exposure in the work area.

Current OSHA permissible exposure limits for trichloroethylene are 100 ppm (8-hours, time weighted average (TWA)); 100-200 ppm excursions are allowed providing the 8-hour TWA is at or below 100 ppm; 200-300 ppm excursions allowed for maximum of 5 minutes in any 2-hour period; 300 ppm maximum allowable concentration (must not be exceeded). Trichloroethylene has an odor threshold of 50 ppm.

Studies have indicated that exposure above the OSHA permissible exposure limits may result in unhealthful symptoms or irreversible health effects. This indicates that OSHA exposure limits and below are so designated because unhealthful effects are not experienced at these levels and no physical damage will occur. A 0.02 ppm trichloroethylene level (assuming worst cast) is 5000 times smaller than the 100 ppm level determined acceptable over a 8-hour period, therefore posing negligible impact to the

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF HAZARDOUS WASTE
GENERATOR'S ANNUAL REPORT
FOR YEAR OF 1982

Gold Shield Solvents Division

1. GENERATOR'S NAME Detrex Chemical Industries, Inc. 2. EPA ID NO. NJT000029074 (1/1/82 thru 11/18/8 NJD047318043 (11/19/82 and after)

3. ADDRESS 835 Industrial Highway, Unit #1, Cinnaminson, NJ 08077 Telephone Number 609 662-1202

4. TRANSPORTER'S NAME S J Transportation 5. EPA ID NO. NJT000009027

6. ADDRESS East Millbrook Avenue, Woodstown, New Jersey 08098

7. FACILITY'S NAME Rollins Environmental Services NJ Inc 8. EPA ID NO. NJD053288239

9. ADDRESS Route #322 West, Bridgeport, New Jersey 08014

10. MANIFEST NO.	DESCRIPTION OF WASTE	DOT HAZ.CLASS	QUANTITY	UNITS	EPA WASTE TYPE	REJECTED
NJ0029998	Waste Trichloroethylene RQ	ORM-A	5000	Gallons	F002	
NJ0101320	"	"	"	"	"	
NJ0101336	"	"	"	"	"	

ATTACHMENT 6-14

- PLACE AN "*" UNDER THE REJECTED COLUMN FOR THOSE MANIFESTS REJECTED BY FACILITY.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF HAZARDOUS WASTE
GENERATOR'S ANNUAL REPORT
FOR YEAR OF 1982

GENERATOR'S NAME Gold Shield Solvents Division
Detrex Chemical Industries, Inc. 2.EPA ID NO. NJT000029074 (1/1/82 thru 11/18/82)
NJD047318043 (11/19/82 and after)

ADDRESS 835 Industrial Highway, Unit #1, Cinnaminson, NJ 08077 Telephone Number 609 662-1202

TRANSPORTER'S NAME Gold Shield Solvents Division
Detrex Chemical Industries, Inc 5.EPA ID NO. NJT000029074

ADDRESS 835 Industrial Highway, Unit #1, Cinnaminson, NJ 08077

FACILITY'S NAME Rollins Environmental Services NJ, Inc. 8.EPA ID NO. NJD053288239

ADDRESS Route #322 West, Bridgeport, New Jersey 08014

.MANIFEST NO.	DESCRIPTION OF WASTE	DOT HAZ.CLASS	QUANTITY	UNITS	EPA WASTE TYPE	REJECTED
NJ0029986	RQ Waste Solvents	Flamable	1256	Pounds	F002	
NJ0101311	"	"	11889	"	"	
NJ0101312	"	"	9949	"	"	

ATTACHMENT G-7

* PLACE AN "*" UNDER THE REJECTED COLUMN FOR THOSE MANIFESTS REJECTED BY FACILITY.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF HAZARDOUS WASTE
GENERATOR'S ANNUAL REPORT
FOR YEAR OF 1982

1. GENERATOR'S NAME Gold Shield Solvents Division Detrex Chemical Industries, Inc.
2. EPA ID NO. NJT000029074 (1/1/82 thru 11/18/82) NJD047318043 (11/19/82 and after)

a. ADDRESS 835 Industrial Highway, Unit #1, Cinnaminson, NJ 08077 Telephone Number 609 662-1202

4. TRANSPORTER'S NAME Gold Shield Solvents Division Detrex Chemical Industries, Inc.
5. EPA ID NO. CTD010168870

a. ADDRESS 260 Chapel Road, South Windsor, Connecticut 06074

7. FACILITY'S NAME Gold Shield Solvents Division Detrex Chemical Industries, Inc.
8. EPA ID NO. CTD010168870

a. ADDRESS 260 Chapel Road, South Windsor, Connecticut 06074

9. MANIFEST NO.	DESCRIPTION OF WASTE	DOT HAZ.CLASS	QUANTITY	UNITS	EPA WASTE TYPE	REJECTED
NJ0101335	1,1,1 trichloroethane	ORM-A	2754	Gallons	F001	
NJ0101381	1,1,1 trichloroethane	"	2916	Gallons	F001	
"	perchloroethylene	"	756	"	"	

ATTACHMENT 6

* - PLACE AN "*" UNDER THE REJECTED COLUMN FOR THOSE MANIFESTS REJECTED BY FACILITY.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF HAZARDOUS WASTE
GENERATOR'S ANNUAL REPORT
FOR YEAR OF 1982

Gold Shield Solvents Division

1. GENERATOR'S NAME Detrex Chemical Industries, Inc. 2. EPA ID NO. NJT000029074 (1/1/82 thru 11/18/8 NJD047318043 (11/19/82 and after)

3. ADDRESS 835 Industrial Highway, Unit #1, Cinnaminson, NJ 08077 Telephone Number 609 662-1202

4. TRANSPORTER'S NAME A-1 Disposal Corporation 5. EPA ID NO. MID059695452

6. ADDRESS 400 Broad Street, P. O. Box #248, Plainwell, Michigan 49080

7. FACILITY'S NAME Chemical Recovery Systems, Inc 8. EPA ID NO. MID060975844

9. ADDRESS 36345 Van Born Road, Romulus, Michigan 48174

10. MANIFEST NO.	DESCRIPTION OF WASTE	DOT HAZ. CLASS	QUANTITY	UNITS	EPA WASTE TYPE	REJECTED
NJ0101375 AND MI0126645	Waste Trichloroethylene RQ	ORM-A	4864	Gallons	F002	

ATTACHMENT G-1

* - PLACE AN "*" UNDER THE REJECTED COLUMN FOR THOSE MANIFESTS REJECTED BY FACILITY.

DETREX INTER-OFFICE CORRESPONDENCE

TO: L. Schlossberg FROM: D. Russell

CC: W. Robrecht, R. Swan, M. Roberts DATE: 12/10/84

SUBJECT: Stack Testing Results - Gold Shield Cinnaminson

At the request of the Cinnaminson Township Board of Health, Mr. James Daloia, Environmental Health Technician for the Burlington County Health Department conducted stack tests and general plant monitoring on Thursday December 6, 1984. Mr. Daloia used a Matheson Model 8014K Toxic Gas Detector specifically for TCE and a Hnu Model P1-101 Photo Ionizer to monitor Total Volatile Organics.

Using the Matheson 8014K with probe about 10 feet from the adsorber intake (directly into main intake stack) Mr. Daloia obtained a reading of 200 p.p.m. About the same distance from the adsorber on the discharge stack, a reading of 0 to 5 p.p.m. This represents an adsorber efficiency rating at about 98%. Our own constant monitor was reading about 5 to 10 p.p.m. at the same time.

Using the Hnu Model P1-101, Mr. Daloia was unable to accurately monitor the stack because of the velocity within the stack. However, readings within the warehouse generally read 6 to 15 p.p.m. of Total Volatile Organics. It should also be noted that our propane powered forklift had been in operating for 10 minutes just prior to the above readings. Another reading was obtained outside our building with the wind blowing fresh air towards the monitor. This reading was 3 to 5 p.p.m. Total Volatile Organics. A third reading was obtained in the offices of our facility of 7 to 8 p.p.m. T.V.O. I feel it should be noted here that our offices were painted several weeks earlier and that a paint odor was and is still noticeable. Mr. Daloia agreed that a paint odor was detected in the office area. To further check the accuracy of the Hnu Model P1-101, the probe was inserted into the distillate collection drum (while the still was in operation) about half way down into the drum which contained about 10 gallons of reclaimed TCE. This reading was 130 p.p.m. T.V.O.

In general, Mr. Daloia felt our operations would cause no problems to either personnel within the plant or persons outside the building and stated that his report to the Cinnaminson Township Board of Health would reflect the same. I requested that a copy of his report be forwarded to us.

ATTACHMENT H

Residents opposed to waste plant

CP 10/31/84 03-08-01

By WAYNE J. DAWKINS
Of the Courier-Post

CINNAMINSON — About 150 highly skeptical residents packed the community center last night for a hearing on whether the state should issue a five-year permit to a company that has been processing hazardous waste in the township for 12 years.

Township officials, homeowners, two farmers, an 11-year-old boy and a pregnant woman were among 40 residents who spoke against issuing the permit to Gold Shield Division of Detrex Chemical Industries, located on Industrial Highway.

The resident's statements were collected by two representatives from the state Department of Environmental Protection (DEP), Division of Waste Management, who conducted the three-hour hearing.

The DEP will review the testimonies and they expect to make a decision in several months.

Residents said they were against against Detrex processing hazardous waste here because this township of about 16,000 residents was too densely populated for such operations and there appeared to be the risk that chemical spills or vapors could contaminate groundwater or pollute the air.

Mayor David Stahl said recently that the township committee unanimously opposed the location of the facility here or elsewhere in the state.

He said "New Jersey has 14 percent of the hazardous waste sites in the country with one percent of the land mass, and has the highest demographic population in the world. We don't need more."

Detrex distributes, recycles and through distillation recovers chlorinated solvents used for degreasing. The waste solvents are stored at the facility in steel drums until they are processed and the recovered chemical, trichloroetylene, is shipped to customers, most of them in the Northeast and Midwest.

"We should not allow this in this area," said Bradford Smith, director of public safety. "It should be in an area where people don't live."

Smith said exposure to trichloroetylene can cause irritation of the nose and throat, nausea, and in some cases can lead to heart failure.

Dick Taylor, township engineer, said he was against the operation because it was too close to residents. On an average day, 1,500 people could be within a 1,000-foot radius of Detrex and be exposed to emissions from the plant, he said.

"Our main concern is the residents. I think without a doubt this application ought to be opposed," Taylor said.

Russell Hunter, a corn farmer, said he opposed it because he is wedged between a landfill and the chemical plant. "We have to breathe methane on one side and chemicals on the other," he said.

Kathleen McCarty was worried whether the chemical processing would affect her unborn child. "For the record, I'm three months pregnant," she told the audience. "You will be waiting for the (DEP) report and I will be worrying."

A number of residents did not trust Detrex because they were unaware that the company had been processing hazardous wastes here since 1972. "Not only do I oppose the application I oppose waiting 12 years to find out such a facility exists," said one resident.

Walter Smith, solicitor for the township board of health, said it was not clear what Detrex did when it settled here in 1972. "They came in the back door," said Smith. "They came in with unclean hands. They came with a certificate of occupancy obtained by the landlord."

Frank Coolick, chief of the bureau of Hazardous Waste Engineering for the DEP, said the state permit would function as tighter enforcement tool if the DEP had to take action against the company for illegal activities.

Coolick said companies such as Detrex were not regulated by the DEP in the 1970s. Since September 1982, the company has been operating under an administrative consent order.

ATTACHMENT I-1

ATTACHMENT I-2

Wednesday, Oct. 31, 1984 The Philadelphia Inquirer

DEP told to reject license for chemical firm

By Lorinda Morrow
Special to The Inquirer

More than 200 Cinnaminson residents attended a public hearing last night to tell officials of the state Department of Environmental Protection that they opposed the licensing of a chemical company that has a temporary permit to recycle chlorinated solvents.

The DEP will review the testimony before making a final decision on a five-year draft permit for the Gold Shield Division of the Dextrex Chemical Industry Inc. on Industrial Highway.

The company has been operating on the temporary permit from the DEP since 1972, when it obtained a certificate of occupancy from the owner of the Industrial Highway building, Whitesell Industries of Delran. The company has operated under the permit because the state had no law regulating such businesses until recently.

Dextrex distributes, recycles and recovers chlorinated solvents from companies in New Jersey, Pennsylvania, Delaware and Connecticut, according to Frank Coolick, chief of the DEP's Bureau of Hazardous Waste Engineering.

The solvents, which can be used to clean heavy machinery, are recycled and stored in drums at the plant.

Residents at the hearing at the Cinnaminson Community Center protested the storage of the chemical compound trichloroethylene, which many said is a dangerous substance that could pose a health hazard to residents.

Township Committeeman Bradford Smith, director of public safety, read from a Dextrex safety guide

(See CINNAMINSON on 2-B)

DEP told to reject license for chemical firm

CINNAMINSON, from 1-B

that stated that the side effects of the compund included cardiac arrest.

Coolick said the DEP was reviewing the licensing of about 303 facilities in New Jersey because of a federal law that took effect in New Jersey in 1981. The law, the Resource Conservation Recovery Act, requires the licensing of facilities such as Dextrex.

Coolick said the DEP could take several months to review last night's testimony, before reaching a decision.

Township Mayor David Stahl testified that the township committee was "vigorously protesting" the licensing of the company because of the substances it emits during the recycling process.

He said the fumes from the chemicals had destroyed the company's heating system, and he questioned what effects the fumes could have on residents.

Deputy Mayor Steven Nappollelio said legal questions about the permit would be raised at the next meeting of the township Planning Board, on Nov. 27.

He also questioned the building's safety records and the rights of residents if the company goes into bankruptcy and chemicals are left on the property.

"The number-one problem is what you're throwing out into the atmosphere. It's a dangerous material, and we have enough of those problems here," said Walter Smith, the attorney for the local Board of Health. "They came in here through the back door. They came here with dirty hands."

Dextrex branch manager Dale Russell, who attended the meeting, would not comment on specific concerns of the residents.

"Everything that's been brought up will be answered and has already been complied with," he said.

Coolick said a report answering the charges in detail would be distributed within several months.

He added the DEP's Bureau of Air Pollution Control approved the firm's smokestack operation.

"I don't think we should allow this kind of thing into an area that's so populated," said Township Committeeman Bradford Smith. "And I think the DEP should seriously consider what it's doing to the township in approving the permit. We are on the record as opposing it and will oppose it until it's not there anymore."

Coolick told residents that Dextrex could store and distribute the solvents if the permit to recycle hazardous waste were not approved.

COURIER-POST CP 11/7/84

Opinion

Who has final say on environment?

New Jersey's Department of Environmental Protection claims pre-eminence over local authorities when it comes to deciding what can and cannot be done to the environment; but it does not always assert its authority — preferring at times to let local officials have their way. Nor do the courts always agree with the department's contention that it has the final say.

The result is confusion about who decides what. Can municipalities block landfills or chemical companies they don't want? Or does the state have that prerogative in the interest of more efficient regulation and the greater good?

Events in recent weeks, far from providing definitive answers, have further muddled things. After the Gloucester County freeholders voted to close the Kinsley Landfill, for example, the DEP was expected to step in to keep the landfill open in the absence of a suitable alternative. The department declined, declaring it was up to local authorities to figure out where to dump their trash. On previous occasions, the department had gone as far as to order trash shipped from one end of the state to the other in the interest of orderly disposal.

Last week, a Superior Court judge in Gloucester County ruled that Logan Township has the right to block Rollins Environmental Services, a hazardous waste treatment facility licensed by the state, from burning PCBs. The company argued that only the state and the federal governments have the authority to regulate their activities, but Judge Edward Miller disagreed.

"The Legislature," Judge Miller wrote, "has given municipalities in this state broad powers to protect the health, safety and welfare of their inhabitants."

If Judge Miller is correct, why did residents and officials in Cinnaminson expend so much energy last week trying to persuade the DEP to deny a local chemical company permission to process hazardous chemicals? The plant, the residents said, is too close to residential areas to be allowed to continue operating. If Judge Miller is correct, all Cinnaminson needed to do was pass an ordinance blocking such industrial activity.

Our guess is that Judge Miller is not right, and that his decision will be overturned on appeal. The state may not always assert its authority in these matters — it was not a party to the Rollins case, for example — but in most cases where it does it can be expected to prevail.

The DEP has both statute and the preponderance of case law on its side. The Hazardous Waste Treatment Facility Siting Act, for example, specifically grants the state ultimate authority to locate major treatment plants where it deems most suitable, regardless of local objections. The Solid Waste Management Act, which governs trash disposal, alludes to the state's pre-eminence in regulating landfills and other waste facilities. In general, where state and local authority conflict and local policy will impede state regulation, the courts have ruled in favor of state authority.

The resultant diminishment of home rule, while not always pleasant, is necessary when dealing with problems that extend far beyond municipal boundaries and exceed the ability of local communities to regulate.

ATTACHMENT I-3

FILE COPY

Burlington County Times
Friday, July 25, 1986

Firm pushing to restart waste recycling center

By Kevin G. Keane
Times staff writer

CINNAMINSON — A Superior Court judge was expected to rule today on whether the township has the right to interfere with the processing of hazardous solvents at a chemical way station on Industrial Highway.

Detrex Chemical Industries has asked Superior Court Judge Martin L. Haines for a court order that would allow the company to restart the processing of trichloroethylene, or TCE.

Detrex had been operating what it calls a "hazardous waste solvent recyling transfer station" at its Industrial Highway plant since 1971. Solvents are collected by Detrex from various local industries and most are held in 55-gallon drums at the plant to await transfer.

TCE, however, is processed through a filtering system, during which emissions are vented through a large smokestack. The solvent is then collected for reuse.

In 1984, the township zoning officer ordered the recyling center closed, citing a zoning restriction prohibiting the processing of petroleum-based products. Later the same year, the township zoning board overturned the ruling, stating that the company was operating the plant under proper guidelines and was not required to apply for a variance.

The ruling caused a public outcry by citizens concerned about the handling of hazardous materials. In July 1985, the township issued a cease and desist order to Detrex, claiming the processing plant was not permitted under the township-issued occupancy permit.

Since then, the company has not processed TCE. Nonetheless, in October 1985, the state Department of Environmental Protection issued a five-year operating permit for the recycling station, over the objections of the township.

The county Health Department also has inspected the operations and concluded that the company was in "substantial compliance" with all state, federal and local pollution-control standards.

Attorneys for Detrex have asked Haines to rule that the township has no authority to restrict the handling and processing of hazardous materials. The company cited various Supreme Court rulings that concluded that municipalities should leave the regulation of hazardous materials to the state DEP and the federal Environmental Protection Agency.

Township solicitor John Harrington said he expected the company to immediately restart processing TCE should Haines rule in its favor.

ATTACHMENT I-4

BOARD OF CHOSEN FREEHOLDERS
OF THE COUNTY OF BURLINGTON
MOUNT HOLLY, NEW JERSEY
08060

OFFICE OF:
BURLINGTON COUNTY
HEALTH DEPARTMENT
Telephone 267-0631
Area Code 609

January 25, 1905

Cinnaminson Twp. Board of Health
c/o John Hughes
Municipal Building
1621 Riverton Road
Cinnaminson, N.J. 08077

RE: Detrex Chemical Industries Inc.
835 Industrial Highway
Cinna., N.J. 08077
Block 507 Lot 5.01

Dear Members of the Board:

Acting as agents for the board, this office conducted an investigation into the operations of Detrex Chemical Industries, Gold Shield Division Facility located at 835 Inudstrial Highway.

Gold Shield division of Detrex Chemical is engaged in the distribution, recycling and recovery of chlorinated solvents.

Employing eight people, the facility is housed within an industrial building which is used as a warehouse and distribution center.

HAZARDOUS WASTE CONTROL

Detrex accepts solvents at its facility that are spent and only from customers to whom the company has sold the degreasing solvents to.

Solvents that are stored at the facility for transfer (only) to other company facilities include: 1,1,1, Trichlorethane, Methylene Chloride, Perchlorethylene and Trichlorotriflouroethane.

These solvents are collected from other divisions within the corporation or from other companies that have contracts with Detrex for removal and or recovery of used solvents. Collection vechicles and collection containers namely 55 gallon steel drums are approved by N.J.D.O.T. and N.J.D.E.P. - Trichloroethylene (T.C.E.) is the only solvent that is processed through their recovery - recycling operation.

This process includes collection and transporting the spent T.C.E. from one or more generators, as the need for removal and maximum storage of their hazardous waste in predicated by state hazardous waste regulations. Storage of the waste solvent within the building is confined to a designated area that

ATTACHMENT J-1

has 3" elevated bermed concrete floor absent of floor drains. Here the drums of solvent await sampling to determine solvent content and compatibility with the recovery equipment. Drums with insuffident solvent content are pumped into a 4,000 gal. storage tank also located within the building. Once storage capacity is reached, waste materials (still bottoms) are collected, transported and disposed of by Rollins Chemical Co.

Rollins presently has the contract to dispose of Detrex's still bottom waste. Rollins Chemical is registered with the E.P.A. and D.E.P. as a licensed hazardous waste treatment, storage and disposal contract facility. Drums that contain suffident T.C.E. solvent content, and are compatible with the recovery equipment are removed of their contents and pumped into a 500 gallon feed tank. A metered flow of spent T.C.E then enters the distillation unit. Here the solvent is purified by removal of any foreign substances that is either suspended or dissolved within the liquid. Distillation, desiccation and stabilization are the three steps necessary to achieve a usable product.

Wastes accumulated in the distillation unit are pumped into the still bottom tank and stored until disposed of. The maximum storage of still bottoms at any given time would by subject to existing maximum still bottom storage tank capacity equaling 4,000 gallons. The maximum spent solvent, hazardous waste accepted for treatment or transfer shall be no more htan 300 - 55 gallon drums approximately 16,500 gallons. The distillate solvents apon meeting specifications that are predetermined by N.J.D.E.P. and their own industrial user standards are then pumped to a storage tank outside the building or into appropriate steel drums for redistribution.

The outside storage tanks and their concrete vaulted enclosures were designed and constructed to prevent accidental discharge of solvents onto the ground or water ways of the state or to preclude other potential hazards associated with this operation.

Once the solvent distillate meets product specifications it no longer is considered a hazardous waste.

The distillation unit operates on a as needed basis, normal working time during the week is from 4-6 hours during/operating days.

Detrex is currently operating under a Administrative Consent order issued by the N.J.D.E.P.D.W.M. in 1982. The consent order allows Detrex to operate without a permit with the understanding that the company will meet conditions and regulations specified in the approved permit, under the provision of N.J.S.A. 13:1E - 1 et seq. known as the Solid Waste Management Act.

Conditions included within the draft permit are; but not limited to:

1. Duty of corporation to comply with conditions and emplemenation of the permit.

ATTACHMENT J-2

2. Proper operation and maintenance of the facility.

3. Obligation to provide information to enforcement officials.

4. Granting representatives of the N.J.D.E.P. the right of entry while conducting pertinent official business.

5. Monitoring and recording all activities pertinent to their operation.

6. If sale of business is comtemplated, prior to sale notification must be made to D.E.P.

7. Strictly adhering to procedures that are established by D.E.P.

8. Except only those waste types which you are registered to take.

9. Consistantly analyse and record all waste materials excepted by company.

10. Comply with the Hazardous Waste Manifest systems and handling requirements (NJAC 7:26 - 7.1 et seq.).

11. In order to minimize the possibility of a fire, explosion or any unplanned release of hazardous waste/facility must have the appropriate equipment or safeguards incorporated into the design and operation.

12. In the event of an emergency the company must have a contingency plan established to alert employees and local fire and police departments.

13. Daily inspections of the facility by qualified individuals shall be made by the company to ensure the structural integrity of all equipment. Testing of tanks and a written daily log of the conditions shall also be monitiored.

14. Personnel training will have to be provided for safety and operational compliance.

Representatives of D.E.P. and B.C.H.D. conducted a joint inspection of the facility on 11/26/84. One minor violation was found regarding the improper storage of empty drums which did not allow proper access to adjacent storage area where drums containing waste were being placed. The violation was noted on D.E.P. inspection forms and corrected within one week. Two other inspections were made by representatives of this office during the month of December, in addition to routine bi-weekly state inspections. All inspections results concluded that the facility was in substaintial compliance of all hazardous waste regulations. A review of D.E.P.'s enforcement file revealed only one violation that warranted a penalty, this occured in Feburary of 1984, concerning acceptance of wastes that were not properly manifested. One reported spill occured within the last year of operation; when one pint of liquid waste spilled onto the interior floor which was immediately cleaned up, according to established proceedures.

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AIR POLLUTION

The potential for release of air contaminates at Detrex is limited to emissions of volatile organic substances. Several locations throughout the facility are subject to produce these emissions and presently contain emission control devices. Eight areas that required control devices by D.E.Q. Bureau of Air Polluton Control are two exterior product storage tanks, waste solvent tank, feed tank, distillate tank, transfer station, distillation unit and drying columns. The two 15,000 gallon exterior product storage tanks that contain T.C.E. and 1,1,1, Trichloroethane has a separate tri-functional control process which includes a "closed loop" filling system, a calcium chloride drying filter and a submerged inlet that helps reduce the amount of vapors generated during periods of time that the liquid content of the tanks are disturbed. (i.e. filling pumping) All other sources of emissions are controlled by a interconnecting exhaust collection system that transports vapors through a carbon adsorption unit. This system provides the appropriate contact time, and surface area for the organic, non-polor molecules to adher to the non-polor molecular carbon therefore providing a specific removal mechanism that permits water vapor and other non targeted air constituents to travel out the exhaust stack. Carbon adsorptive capacity a sometimes refered to "retentivity" is directly related to concentration of the adsorpate and the amount of time the adsorpent has been used. Conversation with the branch manager revealed a routine predetermined operating time prior to steam regeneration of the carbon. It was also notied that the unit installed was over designed for the present level. capacity.

The effluent gases exit the system through the eight inch diameter stack that is positioned on top of the facility at an elevation of forty feet above existing road elevation. Exit velocity of the gas must meet a minimum of 3600 feet mimimum. in a upward direction, providing appropriate dispersion velocities and reducing the chance of "down wash". A review of the document received by this office from the N.J.D.E. Quality Bureau of Air Polluton Control revealed that present emissions standards have been met utilizing the above mentioned systems. Bureau of Air Polluton Control based their findings on information submitted to them by the Detrex Corporation advising the bureau of the measures taken to reduce TVOS emissions to a rate or concentration equivalent to advancesin the art of control. Pursuant to Title 7 Chapter 27 Subchapter 17, Control and Prohibition of Air Pollutants by toxic substances. The interpretation of the emissions concentrations allowable for this type of contaminant is no less than 95% removal efficiency at all times. A representative of this office preformed test at the facility on 12/6/84. Sampling equipment used for that testing included a toxic gas detector model 8014 K manufactured by the Matheson Kitagowa Corp. and a total volatile organic dector model P1-101 photoinization unit manufactured by H.NU.Systems Inc. Testing procedures included: testing ambient air conditions both outside and within the general structures of the facility with the TVO dector and a stack test for T.E.C. of the influent and effluent gas stream with the toxic gas detection unit. Results of the testing provided that; ambient air conditions upwind and downwind from the stack were a constant 3-5 P.P.M.-T.O.V. with no detectable impact. Results from sampling within the facility were from 5-15 P.P.M.-T.O.V. in the warehouse area, and 7-8 P.P.M.-T.O.V. within the office portion of the facility.

Other suspected sources of emissions that were sampled were the distillate drum that had a semi-open top. Results of 15 PPM at the lid area with 130 PPM at the surface of the liquid. Exhaust from the propane powered forklift was 120 P.P.M.-T.O.V.

Operation of the forklift during the time of the analysis contributed significently to the ambient warehouse TOV levels. Stack testing results revealed a 200 PPM influent TCE Level and a non-detertable TCE effluent quality equating to a removal efficency of not less than 97.5% meeting or exceeding current standard conditions.

GENERAL CONDITIONS OF INDUSTRIAL PARK

Research and additional surveys that were conducted by this office included: one complaint investigation concerning a foamy substance floating on the surface of ponding water adjacent to the Detrex building this office has not determined its "point of origin" however, a water reactivity analysis was undertaken with the cooperation of Detrex personel and the results proved that the substance contained in the water was not any of the stored substances associated with the Detrex operation. Further investigation did reveal a potential source of emission from a chemical corporation (Chemx) located directly across the loading dock area from Detrex.

This company produces various kinds of industrial cleaning compounds which would result in a foamy surfactant type reaction simular to the substance found in the smaples taken of the ponded water.

I was additionally informed that Chemx Corporation employees test their product by washing company owned vechicles adjacent to areas experiencing ponding water. Contact was made with officals of Chemx at which time I informed them of the problem.

Soil testing of adjacent properties was preformed on 12/14/84. Determinations made by probing the shallow soil profile revealed no impact to areas of most probable concentration.

Conversations with employees of other commercial operations adjacent to Detrex revealed other potential odor producing operations within the Industrial Complex. A survey of these areas revealed two possible sources of air contaminate emissions that could have a greater impact on air quality than the targeted facility. Tomken Plating Co., Inc. located within a few hundred feet of Detrex has emission stacks that were installed to vent gases from the electroplating anodizing operation housed within. Research into possible emissions standard violation revealed both D.E.P. and D.E.Q. enforcement activity currently being conducted. Quality Industrial Finisher Co., Inc. users of lacquer based solvent paints and other industrial coatings have a high degree of odor producing potential.

In respect to our findings, this office has determined that Detrex Chemical Industries Inc. facility located at 835 Industrial Highway is in substantial compliance of all Federal, State and local air pollution and hazardous waste regulations.

ATTACHMENT J-5

Two areas of concern that we feel need additional attention are the establishment of a air monitoring program to be performed by an outside State Certified Contractor to periodically perform appropriate tests to determine emissions standards compliance and equipment i.e. Carbon adsorption unit, ventilation system and efficiency ratings. We suggest incorporating this requirement into the Air Pollution Permit. This procedure would further protect the health of the public most likely to be affected as well as the company by assuring the safety of the employees operating the facility. The second area that we feel needs additional attention is the loading dock area. In the event of an accidental spill or release of materials that are being handled from collector/hauler vechicles to the bermed concrete floor space, spilled materials could theoretically flow onto the macadam surface which is sloped away from the building out into the general parking, access roadway. During periods of inclement weather this material could enter adjacent surface water drainage courses. To prevent this potential hazard, construction of a perimeter subsurface drainage course that allows rain water which is lighter than materials handled at the facility to flow over a solvent/water trap and the heavier solvent materials to accumulate within the sump pit existing within the adjacent product storage enclosurer, thereby, eliminating potential surface water release.

Should you have any questions regarding this matter, please do not hesitate to contact this office.

Sincerely,

James Daloia
Environmental Health Technician

JD/sc

cc: Brad Smith, Director of Health & Corrections
Walter Trommelen, Public Health Coordinator
Chuck Schiers, Ennvironmental Health Coordinator
Fred Lawson, Pollution Control Coordinator
Bill Sharp, Cinna. Twp. Zoning Officer
MaryJernigan, Asst. Environmental Engineer
Dale Russel, Branch Manager, Detrex
File

Enclosures

ATTACHMENT J-6

EXPIRATION DATE March 3, 1985

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT
32 E. Hanover St., CN 028, Trenton, N.J. 08625

ARWAN M. SADAT, P.E.
DIRECTOR

LINO F. PEREIRA, P.E.
DEPUTY DIRECTOR

RECEIVED
DEC - 5 1984
DETREX CHEMICAL
CINNAMINSON, N. J.

Dale S. Russell
Detrex Chemical Industries
835 Industrial Highway
Cinnaminson, NJ 08077

F380480840
DEB# S6348

Pursuant to N.J.A.C. 7:26-3.1 et seq. and N.J.A.C. 7:26-7.1 et seq.; you are temporarily authorized and licensed to receive and transport hazardous waste in the State of New Jersey.

This temporary license is not transferrable to any other person and all rights and privileges granted herein are automatically withdrawn on the expiration date noted above. Erasures, strike-overs, additions, or any other evidence of tampering with this document will render it invalid.

The listing below represents a complete list of vehicles temporarily authorized to haul hazardous waste. A copy of this document must be carried in the authorized vehicles at all times.

If there are any questions, please contact the Bureau of Registration, Division of Waste Management at (609) 292-5233.

Anthony J. Cavalier (GB)
ANTHONY J. CAVALIER, CHIEF
BUREAU OF REGISTRATION AND
PERMITS ADMINISTRATION

LICENSE PLATE #
****
NJ XG19JD
****

New Jersey Is An Equal Opportunity Employer

ATTACHMENT J-7

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT
32 E. Hanover St., CN 028, Trenton, N.J. 08625

DR. MARWAN M. SADAT, P.E.
DIRECTOR

LINO F. PEREIRA, P.E.
DEPUTY DIRECTOR

Hazardous Waste Facility Permit

Under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act, this permit is hereby issued to:

Gold Shield Division of Detrex Chemical Industries, Inc.
835 Industrial Highway - Unit #1
Cinnaminson, New Jersey 08077

For the Purpose of Operating a:	Waste Solvent Recycling/Transfer Facility
on Lot No.:	5.01
Block No.	507
Location:	835 Industrial Highway - Unit #1
in the Municipality of:	Cinnaminson
County:	Burlington
Under Facility Permit No.:	0308D

This permit is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This permit shall not prejudice any claim the State may have to Riparian land nor does it permit the registrant to fill or alter, or allow to be filled or altered, in any way, lands that are deemed to be Riparian, Wetlands, stream encroachment or flood plains, or within the Coastal Area Facility Review Act (CAFRA) zone or allow the discharge of pollutants to waters of this State without first acquiring the necessary grants, permits, or approvals from the Department of Environmental Protection or the U.S. Environmental Protection Agency.

10/17/85
DATE

Dr. Marwan M. Sadat, P.E.
Director

October 17, 1990
EXPIRATION DATE

ATTACHMENT K-1

This permit, along with the referenced engineering plans and report, herein specified, shall constitute the sole Hazardous Waste Facility Permit for the operation of Gold Shield Division of Detrex Chemical Industries, Inc., in Cinnaminson, Burlington County. Any Registration or Approval previously issued by the Division of Waste Management or its predecessor agencies is hereby superseded.

This permit is issued and is effective for a term of five years. This permit is not transferrable to any person. The Department will require revocation and reissuance of the permit in accordance with N.J.A.C. 7:26-1 et seq. whenever ownership or operational control of a facility changes. The permittee need not comply with the conditions of this permit to the extent and for the durations such noncompliance is authorized by an emergency permit (N.J.A.C. 7:26-12.9).

The permit is conditioned upon compliance with and implementation of the following:

1) Duty to Comply

The permittee shall comply with all conditions of this Permit. Any permit non-compliance constitutes a violation of the Solid Waste Management Act (N.J.S.A. 13:1E-1.1 et seq.) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Any generator, hauler, facility operator or any other person who discharges or is responsible for discharge of hazardous wastes on land or in the waters of the State of New Jersey or at any other place other than an approved hazardous waste facility shall be subject to penalties pursuant to N.J.S.A. 58:10A-1 et seq.

2) Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a complete application for a new permit at least 180 days prior to permit expiration, and shall obtain a new permit prior to expiration of this permit.

3) Duty to Halt or Reduce Activity

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4) Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from non-compliance with this permit.

5) Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similiar systems only when necessary to achieve compliance with the conditions of this permit.

The permittee shall establish a process production sheet at the facility. A process production sheet shall be completed for each process performed. The sheet should include lab approval on the applicable waste analysis plan in Condition 16, a description of the process, including exact amounts of materials to be used, as well as the operating conditions at which the process will be conducted. If a discrepancy occurs in any of these areas, the operator shall receive written approval from supervisory personnel before activities can continue.

6) Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any permit condition.

7) Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

8) Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

9) Right of Entry

The permittee shall allow an authorized representative of the Department upon presentation of credentials to:

(a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records shall be kept under the conditions of this permit;

(b) Have access to and copy any records that should be kept under the conditions of this permit;

(c) Inspect any facilities, equipment (including monitoring control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor for the purpose of assuring permit compliance or as otherwise authorized by the Solid Waste Management Act (N.J.S.A. 13:1E-1.1 et seq.), any substances at any location.

10) Monitoring and Records

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(a) The permittee shall retain records of all monitoring information, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the Department at any time.

(b) Records of monitoring information shall include:

(1) the date, exact place, and time of sampling or measurement;

(2) the individual(s) who performed the sampling or measurements;

(3) the date(s) analyses were performed;

(4) the individual(s) who performed the analyses;

(5) the analytical techniques or methods used; and

(6) the results of each analysis.

11) Signatory Requirements

All applications, reports, or information submitted to the Department shall be signed and certified pursuant to N.J.A.C. 7:26-12.2(j).

12) Reporting Requirements

(a) Upon issuance of this permit, the permittee shall comply with the procedure outlined in Conditions 12(a)1 and 12(a)2 below. Failure to comply with the aforementioned procedure shall be cause for immediate revocation of this permit:

(1) The permittee shall submit to the Department, by certified mail or hand delivery, within thirty (30) days of the effective date of this permit, a letter signed by the permittee and a registered professional engineer stating that the facility layout and design is in compliance with the Engineering Plans and Reports (see Paragraph 13), and

(2) The Department shall inspect the facility to determine whether or not it is in compliance with the designs set forth in the Engineering Plans and Reports. If within 15 days of the date of submission of the letter in Condition 12(a)(1) of this section, the permittee has not received from the Department the intent to inspect, prior inspection is waived and it is understood that the facility meets the design requirements. If the facility is not in compliance with the designs, a schedule shall be submitted within thirty (30) days of the date of the Department's inspection outlining how the facility will be brought into compliance. The schedule shall be subject to the Department's approval.

(b) Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. The permittee shall obtain Departmental approval, prior to implementation, for any such alteration or addition subject to Departmental regulations or the conditions of this permit, including permit modification or permit revocation and reissuance, if necessary.

(c) Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such advance notice shall not stay the applicability of said permit requirements or the applicability of Condition 1 of this permit, nor shall it relieve the permittee from the obligation to obtain all necessary Departmental approvals of such changes prior to implementation, including permit modification, permit revocation and reissuance, or issuance of an emergency permit, where necessary.

(d) Transfer of Ownership or Operational Control

(1) Permits issued pursuant to N.J.A.C. 7:26-12.1 et seq. are not transferrable directly to a new owner or operator.

(2) The permittee shall notify the Department at least 180 days in advance of any proposed change of ownership or operational control of a facility. The notice shall include:

(i) A disclosure statement prepared by the proposed new permittee meeting the requirements of N.J.A.C. 7:26-12.2(h);

(ii) A written agreement between the existing permittee and the proposed new permittee containing a specific future date for transfer of permit responsibilities coverage and liabilities between them;

(iii) A demonstration that the financial responsibility requirements of N.J.A.C. 7:26-9.10 and N.J.A.C. 7:26-9.13 will be met by the proposed new permittee.

(3) A new owner or operator may commence operations at the facility only after the existing permit has been revoked and reissued pursuant to N.J.A.C. 7:26-12.6(c).

(4) The Department reserves the right to terminate the existing permit for cause pursuant to N.J.A.C. 7:26-12.7.

(5) The permittee of record remains liable for ensuring compliance with all conditions of the permit unless and until the existing permit is reissued in the name of the new owner or operator.

(e) Manifest Discrepancy-The following reports shall also be submitted.

(1) If a significant discrepancy in a manifest is discovered, the permittee shall attempt to reconcile the discrepancy. If not resolved within the fifteen days, this permittee shall submit a letter report including a copy of the manifest to the Department.

(2) An unmanifested waste report shall be submitted to the Department within fifteen days of receipt of unmanifested waste.

(f) Annual Reports

The permittee must prepare and submit two copies of a facility annual report to the Department as per N.J.A.C. 7:26-7.6(f)2 as well as a generator's annual report per N.J.A.C. 7:26-7.4(g) by March 1 of each year, covering the previous calendar year.

(g) Discharge and Other Emergency Reporting

The permittee shall report any noncompliance which may endanger human health or the environment. The following information shall be reported orally to the Department within 24 hours after the permittee becomes aware of the circumstances by calling (609) 292-5560 during business hours or (609) 292-7172 at all other times.

(1) Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.

(2) Any information of a release or discharge of hazardous waste, or of a fire or explosion from a hazardous waste facility which could threaten the environment or human health outside the facility.

(3) The description of the occurrence and its cause shall include:

(i) Name, address, and telephone number of the owner or operator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time and type of incident;

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances to the address in Section (j) of this condition. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(h) Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section (c) or (g) of this Condition within 30 days of the time the permittee becomes aware of the noncompliance. The reports shall contain the information listed in Section (g) of this Condition.

(i) Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

(j) Department Address

All reports and submittals required by this permit are to be submitted to the Department of Environmental Protection at the following address:

Department of Environmental Protection
Division of Waste Management
Chief, Bureau of Hazardous Waste Engineering
CN028
Trenton, New Jersey 08625

13) Referenced Engineering Plans and Reports

The operation of the facility shall be in accordance with Title 7, Chapter 26 of the New Jersey Administrative Code and the following submissions:

(a) Gold Shield Division of Detrex Chemical Industries, Inc. Permit Application, dated December 16, 1982, signed by C. B. Stockmeyer, Vice President and Treasurer.

(b) Engineering Designs prepared and sealed by William J. McCamy, N.J.P.E. License No. 6588, dated February 15, 1982 and revised April 1, 1982.

(c) Amendment letter and revised Part A application dated January 18, 1984, and signed by W. G. Robrecht, Manager of Corporate Engineering.

(d) Product quality discussion dated June 27, 1984, signed by W. G. Robrecht, Manager of Corporate Engineering.

(e) Additional information to augment the permit application dated March 20, 1985, signed by W. G. Robrecht, Manager of Corporate Engineering.

14) Authorized Activity Section

The permittee is authorized to use the following equipment at the facility.

	Capacity (Gallons)	Use
1 Tank	500	Spent Solvent Feed Tank
1 Tank	550	Distillate Storage
1 Tank	4000	Still Bottom Storage

One steam-heated, water cooled Chlorinated solvent still. The distillation unit is a Model 5350, having a storage capacity of 400 gallons and is manufactured by Detrex Chemical Industries, Inc.

Drying columns used on distilled solvent.

The permittee shall store no more than 16500 gallons (300-55 gallon drums) of hazardous waste accepted for treatment or transfer. Containers of hazardous waste shall be stored within the warehouse in areas specified in the permit application and the amended Part A application submitted January

ATTACHMENT K-8

18, 1984. The three inch peripheral curbing shall be maintained to contain at minimum ten percent of the volume of all the hazardous waste containers. The base underlying the containers should be free of cracks or gaps and be sufficiently impervious to contain leaks and spills until the material is detected and removed. The thickness of the base shall be maintained at a minimum of six inches.

All spent solvents shall be accepted in containers that meet the requirements of N.J.A.C. 7:26-9.4(b).

The permittee shall only accept spent solvents from customers to whom the permittee has sold the degreasing solvents to.

All outgoing shipments of recovered trichloroethylene shall be manifested as hazardous waste to an authorized hazardous waste facility, unless the trichloroethylene meets the following product specifications:

		ASTM Testing Method
Appearance	Clear	D3741
Specific gravity @ 20/20°C	1.460-1.464	D2111
Free Chlorine	None	D2988
Water-No cloud at	-10°C	
Non-Volatile residue, % by weight	0.0025 maximum	D2109

Any changes or alternations to this authorized section must obtain prior approval from the Bureau of Hazardous Waste Engineering.

15) Permitted Waste Types

The permittee is authorized to accept and store for transfer, to an authorized off-site treatment, storage and disposal facility, the following spent halogenated solvents; no distillation or any other form of treatment shall be allowed:

NJ Hazardous Waste No.	
F001, F002	1,1,1 Trichloroethane
F001, F002	Methylene Chloride
F001, F002	Perchloroethylene
F001, F002	Trichlorotriflouroethane
F002	Trichloroethylene

The permittee is authorized to accept, store, and treat the following spent halogenated solvent:

NJ Hazardous Waste No.	
F001	Trichloroethylene

16) Waste Analysis and Quality Control

The permittee shall comply with the following:

(a) A representative sample of every incoming drum of waste solvent shall be taken by using a Drum Thief.

(b) Each representative sample must be analyzed for solvent type and solvent content by using one of the following methods referenced in the permit application:

(1) Specific Gravity Method
(2) Boiling Point Method

(c) The permittee must maintain on-site a readily accessible description of all incoming waste loads. The description shall include:

(1) The date, exact place, and time of sampling or measurements;
(2) The individual(s) who performed the sampling or measurements;
(3) The date(s) analyses were performed;
(4) The individual(s) who performed the analyses;
(5) The type of waste, manifest number, and quantity;
(6) The results from the applicable tests listed above.

(d) If the permittee fails to comply with the provisions of the Hazardous Waste Manifest System and Handling Requirements (N.J.A.C. 7:26-7.1 et seq.) or consigns for shipment, handles, stores or disposes of hazardous waste in a manner inconsistent with these regulations, he shall be subject to penalties pursuant to N.J.S.A. 13:1E-1 et seq.

The permittee shall not accept any material unless the material to be accepted is, in fact, a material which the facility is authorized to handle (see Condition 15 of this permit).

(e) The permittee, if offered hazardous waste of a type which the facility is not authorized to handle, shall:

(1) Not accept the waste from the hauler;

(2) Instruct the hauler to contact the generator for further instructions;

(3) Telephone the generator, and inform the generator that the permittee is not authorized to accept the waste and that the permittee has instructed the hauler to contact the generator for further instructions;

(4) Follow up the telephone call to the generator with a letter verifying the telephone conversation;

(5) Telephone the Department, at (609) 292-5560, and report the unauthorized waste shipment; and

(6) Follow up the telephone call to the Department with a letter verifying the telephone conversation.

(f) Any changes from the approved waste analysis plan are subject to prior approval from the Bureau of Hazardous Waste Engineering.

17) Preparedness and Prevention Plan

The permittee must equip the facility with emergency equipment in order to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous wastes or hazardous waste constituents to the air, surface water, or ground water which could threaten the environment or human health. The facility's equipment must include, but not be limited to, the following:

(a) Portable fire extinguishers mounted in locations throughout the plant.

(b) An adequate volume of water to supply hose streams and portable foam producing equipment necessary in fighting ground fires and tank cooling during emergencies.

(c) Telephone communications must be locally maintained to summon emergency assistance from local fire departments, police departments, state or local emergency response teams.

(d) The peripheral curbing must be maintained free of cracks or gaps that would degrade its impermeability.

(e) Absorbent compounds must be readily available within the facility to be employed as a solvent combatant if a spill should occur.

This equipment shall be tested and maintained as necessary to assure its proper operation in time of emergency.

18) Contingency Plan

(a) In the event of an emergency, a local alarm system must be activated to alert employees. The Cinnaminson Fire Department and Cinnaminson Police Department should be notified immediately. The telephone numbers are:

Cinnaminson Fire Department:	609-267-8300
Cinnaminson Police Department:	609-859-2281

Before assistance arrives, fire fighting equipment listed in Condition 17 should be used to control the emergency.

(b) In the event of a spill, the following must be notified immediately:

(1) Environmental Protection Agency
Oil and Hazardous Materials Section
Raritan Depot, Edison, NJ 08817
Telephone (201) 548-8730

(2) New Jersey Department of Environmental Protection
Spill Response Unit
Yardville, NJ 08625
Telephone: (609) 292-5560 or
(609) 292-7172 (24 hours)

19) Inspections

(a) The permittee must perform daily a site inspection of the facility. Inspection shall be in accordance with the approved Inspection Schedule and N.J.A.C. 7:26-9.4(b) and 10.5(e). All safety and emergency equipment, security devices, and operating and structural equipment used to store and treat hazardous waste shall be checked for indications of structural failure, corrosion, leakage, and mechnical failure.

(b) A written daily log of conditions found and the steps taken to correct the conditions is to be kept on-site. Typewritten duplicates of this log must be maintained on file and must be supplied to Department representatives upon request.

(c) All storage tanks shall have sufficient shell strength and pressure controls to assure that they do not collapse or rupture. A minimum shell thickness of 3/16 inches shall be maintained during the life of the tank.

The test to determine shell thickness shall be approved by the Department. This approved test method shall be performed within ninety (90) days of the date of this permit and every five years thereafter, or earlier if warranted. Test results shall be submitted to the Department within fifteen days of testing and accompanied by a certification statement specified in N.J.A.C. 7:26-12.2(j). Any tanks failing integrity testing must be taken out of service or properly repaired to maintain the minimum shell thickness and prevent leaks, ruptures and corrosion.

20) Security

(a) The permittee shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility.

(b) The permittee must maintain the artificial barrier which completely surrounds the active portion of the facility.

(c) The permittee shall post a sign with the legend, "Danger-Unauthorized Personnel Keep Out", at each entrance to the active portion of the facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion.

21) Personnel Training

Facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of N.J.A.C. 7:26-9.4(g). The permittee shall submit within thirty (30) days of the date of this permit, a description of both introductory and continuing Personnel Training Programs to demonstrate compliance with N.J.A.C. 7:26-9.4(g), including dates personnel training has occurred or is scheduled to occur. The Personnel Training Program must be approved by the Department for this permit to be effective, or this permit will be rendered null and void (see Condition 30).

22) Financial Requirements

(a) The permittee shall continue to demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility. The permittee must maintain liability coverage as demonstrated by the financial test dated March 27, 1984 or obtain and document to the Department alternate liability insurance for sudden accidental occurrences, as specified in N.J.A.C. 7:26-9.13. This insurance shall be maintained in accordance with the requirements of N.J.A.C. 7:26-9.13, specifically 9.13(f)5.

(b) The permittee shall maintain the Surety Bond established with the Firemans Insurance Company of Newark, New Jersey and the Standby Trust Agreement established with the Comerica Bank-Detroit or obtain and document to the Department other financial assurance, as specified in N.J.A.C. 7:26-9.10, in order to provide financial assurance for closure. These financial mechanisms shall be maintained in accordance with the requirements of N.J.A.C. 7:26-9.10.

The permittee must adjust the facility's closure cost estimate for inflation within thirty (30) days after each anniversary of the date on which the first closure cost estimate was prepared. Whenever the current closure cost estimate increases to an amount greater than the amount of the financial mechanism, the permittee, within sixty (60) days after the increase, must either cause the amount of the financial mechanism to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Department, or obtain and document to the Department other financial assurance, as specified in N.J.A.C. 7:26-9.10, to cover the increase.

23) Closure Plan

(a) The permittee must close the facility in the manner that is stated in the revised closure plan submitted by W. G. Robrecht, dated March 20, 1985.

(b) The permittee shall keep a copy of the closure plan and all revisions to the plan at the facility until closure is completed.

(c) The permittee shall amend the closure plan any time changes in operating plans or facility design affect the closure plan or whenever there is a change in the expected year of closure of the facility. The plan must be amended within sixty (60) days of the changes.

(d) The permittee shall notify the Department at least 180 days prior to the date the permittee expects to begin closure, except in cases where the facility's permit is terminated or if the facility is otherwise ordered by judicial decree or compliance order to cease receiving wastes or to close. The date when the owner or operator "expects to begin closure" shall be within thirty (30) days after the date on which the owner or operator expects to receive the final volume of wastes.

24) Plans Available for Inspection

One complete set of all engineering designs and submissions of Condition 13, a narrative description of the operation of the facility and a facility layout drawing, this Hazardous Waste Facility Permit and such other plans that may be required pursuant to this permit shall be kept on-site and shall be available for inspection by representatives of the Department. The following documents shall also be maintained at the facility site:

(a) The Waste Analysis Plan outlined in Condition 16 of this permit in accordance with N.J.A.C. 7:26-9.4(b).

(b) Contingency Plan required by N.J.A.C. 7:26-9.7.

(c) Closure Plan required by N.J.A.C. 7:26-9.8.

(d) Inspection schedule required by N.J.A.C. 7:26-9.4(f).

(e) Personnel training documents and records required by N.J.A.C. 7:26-9.4(g).

(f) Written operating record required by N.J.A.C. 7:26-9.4(i).

(g) Financial documents required by Condition 22 of this permit.

All amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Bureau of Hazardous Waste Engineering for approval and permit modification, if necessary.

25) Operating Record

The permittee shall keep a written operating record at the facility in which the information in N.J.A.C. 7:26-9.4(i) shall be recorded. The information should be recorded as it becomes available and maintained until closure of the facility.

26) Posting of Notice

The attached notice concerning civil and criminal penalties for illegal disposal of hazardous waste must be conspicuously posted and available for all employees to read.

27) Additional Permit Requirements

The following permits must also be obtained and compliance established before this Hazardous Waste Facility Permit can be effective:

(a) Necessary permits from the Bureau of Air Pollution Control for Toxic Volatile Organic Substance emissions pursuant to Title 7, Chapter 27 of the New Jersey Administrative Code.

28) Permit Limitations

(a) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights or any infringement of applicable Federal, State, or local laws or regulations.

(b) This permit does not constitute the sole source of guidelines to be followed. Any new regulations concerning Water Quality, Air Pollution, Hazardous Waste, or other rules of the Department of Environmental Protection, applicable to the facility shall be complied with at the effective date. New regulations are effective upon publication in the New Jersey Register or as otherwise indicated in the Notice of Adoption in the New Jersey Register.

29) Early Expiration of Permit

If, for any reason, the facility ceases to be operated on a continuous basis and/or ceases to be operated by the owners or operators listed in the disclosure statement dated April 7, 1982, the permit expires on its own accord and remains ineffective until reissuance by the Department.

30) Effective Date of this Permit

This permit shall not be effective until all applicable requirements of Conditions 12, 21, 22, and 27 of this permit have been fully complied with and approved by the Department. Non-compliance with the above conditions after this permit is issued shall render this permit null and void.

DETREX CHEMICAL INDUSTRIES, INC.
GOLD SHIELD SOLVENTS DIVISION
835 INDUSTRIAL HIGHWAY, CINNAMINSON, N.J. 08077
609—662-1202 215—925-8257

November 14, 1985

Detrex Chemical Industries, Inc., Gold Shield Solvents Division, Cinnaminson, NJ is fully permitted to the best of our knowledge for all requirements under current New Jersey Department of Environmental Protection, Division of Environmental Quality, Bureau of Air Pollution Control regulations.

The following is a listing and description of the three permits we hold:

1. Permit/Certificate #047778, effective date 4/23/82 is a Permit to operate (with conservation vent) our outside storage tank containing 1,1,1, trichloroethane. This expires 4/17/88

2. Permit/Certificate #047779, effective date 4/18/83 is a Permit to operate (with conservation vent and closed loop filling) our outside storage tank containing trichloroethylene. This expires 4/11/89.

3. Permit/Certificate #067966, effective 4/25/84 is a Permit to operate our Carbon Adsorbtion Unit. This unit significantly reduces our trichloroethylene emissions from distillation operations. This permit expires 7/18/90.

Dale S. Russell, Branch Manager
Detrex Chemical Industries, Inc.
Gold Shield Solvents Division
Cinnaminson, NJ

L

DETREX

ATTACHMENT L-127

Emission Control and Monitoring System

Gold Shield Solvents Division
Cinnaminson, NJ Facility

The emission control and monitoring system at this facility combines state-of-the-art technology with a professionally engineered exhaust system to permit removal of chlorinated hydrocarbon vapors from the air exhausted from the facility.

The system consists of an 18" (spiral duct) main exhaust duct in which all vapors emitted from process equipment are collected. (A drawing of the system is attached). The exhaust gases are passed through a Detrex Model SA-3000 Dual Bed Carbon Adsorber. Each bed contains 700 pounds of activated carbon.

The carbon adsorber is furnished with electronic controls which allow it to operate automatically. The unit will remove solvent vapors from the exhaust by passing the exhaust through one bed while at the same time be regenerating the other bed. Regeneration is accomplished by steam stripping the solvent off the saturated bed and condensing the vapors, allowing for recovery of the solvent. When only water appears in the separator, regeneration is complete and the bed of carbon is ready for use.

Once passed through the bed of carbon, the air is then exhausted through an 18" duct and emitted to the atmosphere 44 feet above grade at a velocity of 3,500 feet per minute. In doing so, the exhaust is mixed with the atmosphere.

Although the carbon adsorption unit operates automatically, an exhaust gas monitor was installed on the discharge duct to allow for monitoring of the chlorinated hydrocarbon content in the exhaust stream. The monitor, ENMET Model ISA-44 Hazardous Gas Monitor, has a probe located in the discharge exhaust duct with the main "remote" station is located at an easily accessible location in the facility. The monitor allows for continuous monitoring of the concentration of solvent contained in the exhaust stream.* When the concentration reaches 75 ppm a yellow light is activated. At 100 ppm a red light and horn (104 decibels) is activated. At such time the bed being used is considered saturated and must be regenerated. The second bed which was previously regenerated is then utilized, allowing for regeneration of the saturated bed. In operating in this manner, plant will not exceed a level of 100 ppm.

*During normal operation, a green light is activated on the main station.

ATTACHMENT L-2

Form VEM-017

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 047778

APC PLANT ID 45136

(Mailing Address)

DETREX CHEMICAL INDUSTRIES, INC.
835 INDUSTRIAL HIGHWAY
CINNAMINSON NJ 08077

(Plant Location)

GOLD SHIELD SOLVENTS DIV.
835 INDUSTRIAL HIGHWAY
CINNAMINSON TWP

Applicant's Designation of Equipment # 3 TANK
N.J. Stack No. 001 No. of Stacks 001 No. of Sources 01
Approval 01/28/81 Effective 04/23/82 Expiration 04/17/93

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

* FIVE YEAR RENEWAL *

THIS RENEWED FIVE YEAR CERTIFICATE IS BEING ISSUED UNDER THE AUTHORITY OF CHAPTER 106, P.L. 1967 (N.J.S.A.26:2C-9.2). THE POSSESSION OF THIS DOCUMENT DOES NOT RELIEVE YOU FROM THE OBLIGATION OF COMPLYING WITH ALL PROVISIONS OF THE NEW JERSEY ADMINISTRATIVE CODE, TITLE 7, CHAPTER 27.

IN ACCORDANCE WITH N.J.S.A. 54:4-3.56 TO 3.58, YOU MAY BE ENTITLED TO AN EXEMPTION OF TAXATION IF YOUR EQUIPMENT IS TAXED AND IS CONSIDERED TO BE AN AIR POLLUTION CONTROL DEVICE. A TAX EXEMPTION APPLICATION MAY BE OBTAINED FROM THE BUREAU OF NEW SOURCE REVIEW.(SEE OTHER SIDE)

IF IT IS NECESSARY TO AMEND YOUR EMERGENCY STANDBY PLANS, PLEASE CONSULT WITH THE APPROPRIATE REGIONAL OFFICE. (SEE OTHER SIDE)

IN ACCORDANCE WITH N.J.A.C. 7:27-8.3(D), THIS PERMIT AND CERTIFICATE MUST BE READILY AVAILABLE FOR INSPECTION ON THE OPERATING PREMISES.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

ATTACHMENT M-1
06/13/88-12

CRO

PERMIT-CERTIFICATE REVIEW FORM

P&CT Number 47778 Date Logged 9/18/80 Stack I.D. 45136-001

Company, Div. DETREX CHEM.

Cancel P&CT 47259 Legal Action

Company Designation of Equipment #3 TANK (1,1,1 Trichloroethane)

Control Apparatus Closed Cont.

Prop. Line 100 ft, # __ Fuel used x10^6Btu/hr

Stack Diam. 9 ft, Type of waste

Stack Ht. 10 ft, Tank Capacity x10^3Gallons

Exit temp. 70 °F, Tank Diameter feet

Exit flow 1 cfm, Thruput x10^3Gal/year

System use 2760 hr/y, Fill Rate GPM

Attachments to Permit

____ Stacks, ____ Sources.

EMISSIONS	MW	VP	PPM OTL	PPM Act.	Without Con. #/h	Without Con. T/y	With Con. #/h	With Con. T/y	EFF.	Allowable	NJAC 7:27-
1,1,1 Trichloroethane					20.8	.17	1	.008			16.1

ADDITIONAL STATEMENTS :

Approval: Evaluator RM 9/18/80 Supv. William F. Hunt

Stack Tests required for :

Approval Date 9/18/80 Duration 90 Expiration 12/18/80 Letter # 21T

Reasons for Disapproval: Evaluator ____ Date ____

____ 1. Insufficient Information

____ 2. Not State-of-The-Art

____ 3. Equipment Violates ____

1. E.O.P.
2. P.S.D.
3. N.S.P.S.
4. NESHAPS
5. EPA-Audit
6. Carcinogen
7. Pineland

ATTACHMENT M-2

Form VEM-003
1/79

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

TO: New Jersey Department of Environmental Protection
Bureau of Air Pollution Control
CN- 027
Trenton, New Jersey 08625

Read Instructions Before Completing Application

SECTION A

1. Full Business Name: Detrex Chemical Industries, Inc.
2. Mailing Address: P. O. Box 501 (No.) (Street) Detroit (City) MI (State) 48232 (Zip Code)
3. Division and/or Plant Name: Gold Shield Division
4. Plant Location: 835 Industrial Hwy. -Unit 1 (No.) (Street) Cinnaminson (Municipality) Burlington (County)
5. Location of equipment on premises ((Bldg., Dept., area, etc.): Outside/Adjacent to Building
6. Nature of business: Warehouse & Distribution of Industrial Solvents
7. Estimated starting date of construction: September 1980
8. Date equipment to be put in use: October 1980
9. Plant Contact: Dale Russel (Name (Print or type)) Branch Manager (Title) (609) 662-1202 (Telephone No.)

SECTION B

REASON FOR APPLICATION (CHECK ONE)

- ☐ New Equipment without Control Apparatus
- ☐ New Equipment with Control Apparatus
- ☐ New Control Apparatus on Existing Equipment
- ☐ Five Year Renewal of Certificate No. (s)
- ☐ Other (Explain)
- ☒ Modification to Existing Equipment
- ☐ Modification to Existing Control Apparatus
- ☐ Painting Tank White

SECTION C

STACK INFORMATION (EQUIVALENT STACK INFORMATION)

1. Company Designation of Stack (s): ~~#2~~ (~~#3A Inside building~~) TANK NO. 3
2. Previous Certificate Numbers (if any): 4225 9, 9453
3. a. Number of Sources Venting to this Stack: ~~4~~ 1 (Complete a separate VEM-004 for each source)
   b. Number of Stacks Venting Source Operation (s): 1
4. Distance to the nearest Property Line (ft.): ~~Approx 100 Feet~~
5. Stack Diameter (inches): ~~10~~ 2
6. Discharge Height Above Ground (ft.): ~~10~~ 1
7. Exit Temperature of Stack Gases (°F): Ambient
8. Volume of Gas Discharged at Stack Conditions (A.C.F.M.): ~~0.02~~ ?
9. Discharge Direction: ☒ Horizontal ☐ Up ☐ Down

The information supplied on applications VEM-003 and VEM-004, including the data in supplements, is to the best of my knowledge true and correct.

Dale L. Russell (Signature) — 9/15/80 (Date)

Dale Russell (Name (Print or type)) — Manager (Title)

This application will not be processed unless proper fee is submitted.

FOR ASSISTANCE CALL (609) 292-6716

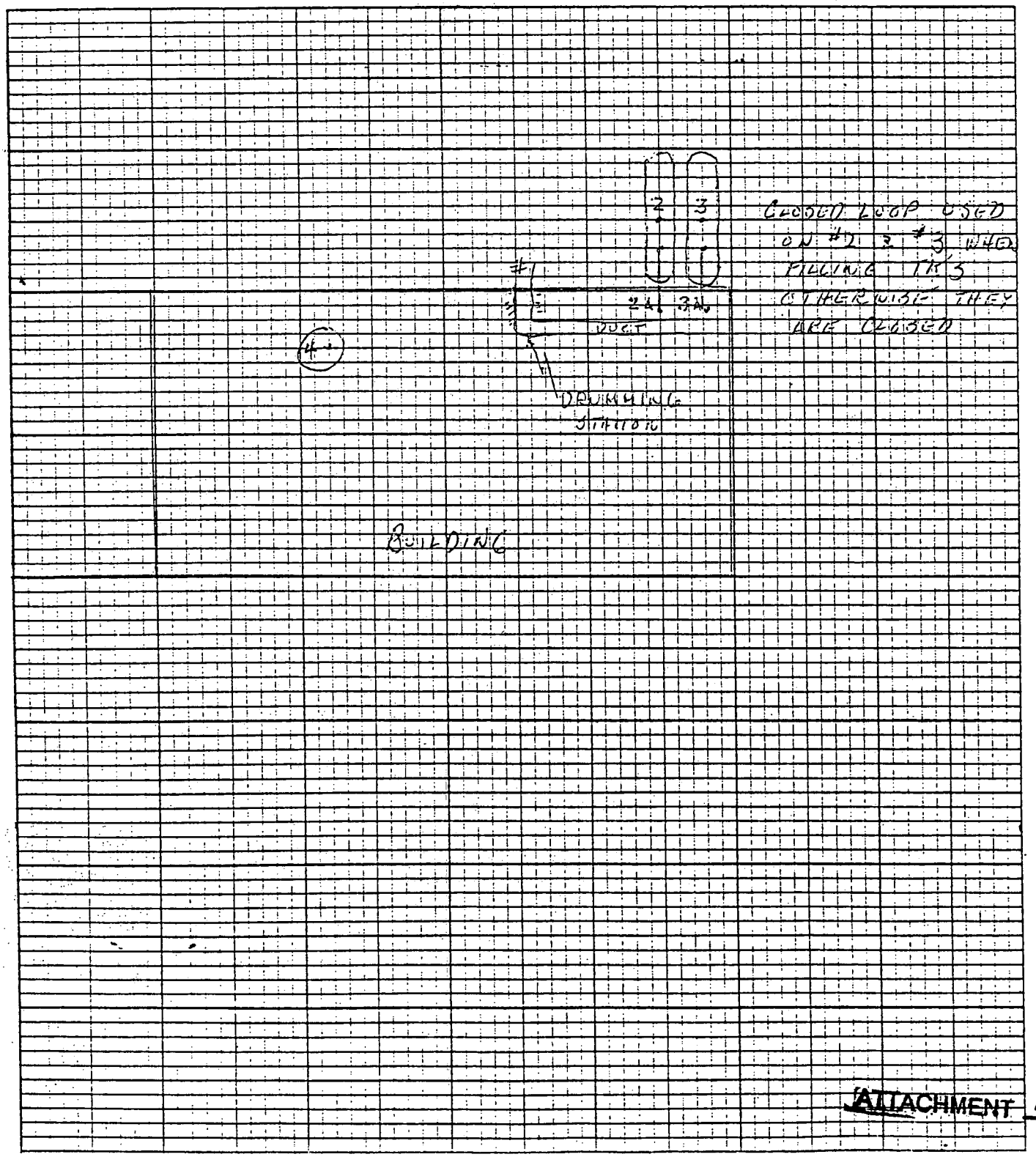
FOR DEPARTMENT USE ONLY

□□□□□ - □□□ - 000 47778

ATTACHMENT M-3 (over)

SECTION D DIAGRAM INSTRUCTIONS - A diagram must be included showing the configuration of all stacks, control apparatus and sources related to this application. NOTE: In cases of multiple stacks, include the following information for each stack: (1) distance to nearest property line, (2) stack diameters, (3) stack height above ground, (4) exit temperature (° F) of stack gases, (5) volume rate of gases (ACFM) discharged at stack conditions, (6) the location and type of control apparatus, (7) direction of flows, and (8) maximum stack emissions.

Diagram



ATTACHMENT M-4

1/79

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT
AND
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form

(Complete this form for each source and submit with application Form VEM-003)

SECTION E

SOURCE INFORMATION

1. Source Description: Storage Tank #3

2. Operating Schedule: 24 Hours/Day; 8760 Hours/Year; Existing Operation Starting Date

3. % Annual Production Throughput By Quarter: 25 Jan.-Mar.; 25 Apr.-June; 25 July-Sept.; 25 Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): 0.02 7; Source Discharge Temperature (°F): Ambient

SECTION F

CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	"Closed-Loop filling of Tk"	Neg.	Neg.	1
Secondary				
Tertiary				

SECTION G

AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
1,1,1 Trichloroethane (tk. filling)	20.8 (17hrs/yr)	1.0 lb/hr ~~Neg.~~	Calculation
1,1,1 trichloroethane (breathing)	0.05 (8760 Hrs/Yr)		Calculation

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc.

Company Designation of Stack (s): #1 (#3A Inside Building)

(over)

ATTACHMENT M-5

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description _____

2. Total Amount Materials Processed ☐ Batch _____ lb/batch, _____ hr/batch ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6 BTU/HR) _____
2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:		
b. Heating Value (Btu/lb):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

1. Type of Unit _____
2. Constituents of Waste (s) _____
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6
4. Amount Burned (lbs./hr.) _____ Type of Auxil. Fuel (If Any) _____

D. STORAGE FACILITY

1. Tank Contents 1,1,1 Trichloroethane
2. Type of Tank or Bin Fixed Roof Height or Length (Ft.) 25
3. Capacity 15 (10^3 Ft.^{3}) ☐ (10^3 Gal.) ☒ Equivalent or Actual Diameter (Ft.) 10

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) .36 Storage Temp. If Not Ambient (°F) Ambient
5. Filling Rate (Gal/Min) 50 Annual Throughput (10^3 Gal/Yr) 50
6. Method of Fill ☐ Top ☐ Bottom ☒ Submerged ☐ Other (Explain Below)
7. Color of Tank ☒ White ☐ Other Exposed to Suns Rays ☒ Yes ☐ No
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)
   Type _____, Thickness (Inches) _____, Thermal Conductivity (BTU/HR/FT^2/°F) _____

For Department Use Only

☐☐☐☐☐ - ☐☐☐ - ☐☐☐

ATTACHMENT M-6

Form VEM-017

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM

All Correspondence must indicate your APC PLANT ID NUMBER

Certificate Number 047779

APC PLANT ID 45136

(Mailing Address)

DETREX CHEMICAL INDUSTRIES, INC.
835 INDUSTRIAL HIGHWAY
CINNAMINSON NJ 08077

(Plant Location)

GOLD SHIELD SOLVENTS DIV.
835 INDUSTRIAL HIGHWAY
CINNAMINSON TWP

Applicant's Designation of Equipment #1 TANK #2
N.J. Stack No. C02 No. of Stacks C01 No. of Sources 01
Approval 01/28/81 Effective 04/18/93 Expiration 04/11/94

* CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT *

* FIVE YEAR RENEWAL *

THIS RENEWED FIVE YEAR CERTIFICATE IS BEING ISSUED UNDER THE AUTHORITY OF CHAPTER 106, P.L. 1967 (N.J.S.A.26:2C-9.2). THE POSSESSION OF THIS DOCUMENT DOES NOT RELIEVE YOU FROM THE OBLIGATION OF COMPLYING WITH ALL PROVISIONS OF THE NEW JERSEY ADMINISTRATIVE CODE, TITLE 7, CHAPTER 27.

IN ACCORDANCE WITH N.J.S.A. 54:4-3.56 TO 3.58, YOU MAY BE ENTITLED TO AN EXEMPTION OF TAXATION IF YOUR EQUIPMENT IS TAXED AND IS CONSIDERED TO BE AN AIR POLLUTION CONTROL DEVICE. A TAX EXEMPTION APPLICATION MAY BE OBTAINED FROM THE BUREAU OF NEW SOURCE REVIEW.(SEE OTHER SIDE)

IF IT IS NECESSARY TO AMEND YOUR EMERGENCY STANDBY PLANS, PLEASE CONSULT WITH THE APPROPRIATE REGIONAL OFFICE. (SEE OTHER SIDE)

IN ACCORDANCE WITH N.J.A.C. 7:27-8.3(D), THIS PERMIT AND CERTIFICATE MUST BE READILY AVAILABLE FOR INSPECTION ON THE OPERATING PREMISES.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027, 401 East State Street
Trenton, New Jersey 08625

Approved by: _____

ATTACHMENT M-7

CRO

03/02/89-12

NJ6

Complete one Section C for each individual unit venting into the stack described in Section D.

Section C

A. (1) Company Designation for Unit: Boiler

(2) Type of Equipment (Mfg. & Name Plate Data): Eclipse SM-G-HL-FM

(3) Type of Fuel: Nat. Gas Grade: —

(4) Heat Content of Fuel: 1000 BTU/SCF

(5) Maximum Firing Rate: 1800 scf/hr

(6) Gross Heat Input of Unit: 1,800,000 BTU/HR

(7) Average Ash Content of Fuel: unk

(8) Method of Firing: Horiz

(9) Type of Control Apparatus: —

(10) Efficiency of Control (Design): —

B. Estimated Emission from this Unit: (1) SO_2 .001 #/hr

(2) Particulates .009 #/hr (3) Other NOx = .216 #/hr AP42

C. Calculations:

SO_2

$\frac{.6 \times 1800}{10^6}$ = .001

Particulates

$\frac{5 \times 1800}{10^6}$ = .009

NOx

$\frac{1800 \times 120}{10^6}$ = .216

ATTACHMENT M-8

(One Page 3 for Each Stack)

Section D

(1) Stack Designation: Boiler Stack

(2) Height of Stack 30 Ft. (3) Inside Diameter at Lip 1 Ft.

(4) Equipment Exhausting Through Stack:

A. Boilers: One

B. Process Equipment (Describe): _____

C. Other (Explain): _____

(5) Are Sampling Ports Available: No

(6) Are Any Alterations Necessary to Conduct Stack Tests Yes

Section E

(1) Total Heat Input (Fuel Burning) 1800,000 BTU/hr (all units)

(2) Total Allowable Emission (Subchapter 4.2a) 1.08 #/hr

(3) Permit: P- —, Dated —; ☐ None

(4) Certificate: CT- —, Expiration Date —

(5) Emissions (Sec. D-AIR 29) — #/hr.

(6) Total Estimate this Stack: .009 #/hr

Section F

(1) Emergency Standby Plans: Emissions — #/hr.

(2) Stack Test Results

Conducted By	Date	Run	Emission #/hr.

(3) Stack Observation

Date 4-7-78 Time 11:00 AM Maximum Reading 0 %

(4) Violation Recorded ☒ No; ☐ Yes

(5) Analysis: Sulfur _____ % Ash _____ %

(Complete when Technical Center report is received)

ATTACHMENT M-9

Date of Report 4-7-78
Date of Inspec. 4-7-78
Time at Site 11:00 AM - 12:10 PM

SOURCE EVALUATION REPORT

PARTICULATE EMISSIONS FROM COMBUSTION OF FUEL

(1) Full Business Name: Detrex Chemical Ind (Gold Shield Solvents)

(2) Mailing Address: 835 Industrial Hwy Cinnaminson 08077
No. Street Municipality Zip Code

(3) Location: _____
No. Street Municipality Zip Code

(4) Ownership: [redacted] Owner ☐ Tenant ☒ Leasee 5-1 Lot 507 Block

(5) Type of Ownership:

☐ Individual ☐ Partnership ☒ Corporation ☐ Government _____

(6) Owner, Officials, etc.

Whitesell Corp. 2601 Broad St Cinn.

(7) Person Interviewed: T Cullen Manager
Title

Section A

Stack Number	Stack Designation	Emission Rate Allowable	Emission Rate Estimated	Compliance Yes	Compliance No
1	Boiler	1.08#/hr	.009#/hr	X	
[redacted]					

Section B

Recommendation: File

Randy D England
Investigator

Env Tech
Title

ATTACHMENT M-10

Form VEM-023 T
1/79

NJ 2

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
BUREAU OF AIR POLLUTION CONTROL

CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT (90 DAY EXTENSION)

Permit and Certificate Number 047779 DEP Plant ID 45136

(Mailing Address)	(Plant Location)
Detrex Chemical Industries 835 Industriel Highway Cinnaminson NJ 08077	Gold Shield Solvents Div. same Burlington County

Applicant's Designation of Equipment (1) 15,000 gal. tank (trichlorethylene)

N.J. Stack No. 002 No. of Stacks 01 No. of Sources 001

Approval 1 (Mo.) 28 (Day) 81 (Year) Start Up ___ (Mo.) ___ (Day) ___ (Year) Expiration 4 (Mo.) 28 (Day) 81 (Year)

THIS TEMPORARY CERTIFICATE IS BEING EXTENDED TO ALLOW FOR:

1. ____ SUBMITTAL OF REQUIRED STACK TESTS. (SEE OTHER SIDE)
2. ____ COMPLETION OF THE INSTALLATION OF THE EQUIPMENT COVERED.
3. ____ FURTHER FIELD/OFFICE EVALUATION.
4. ____ EQUIPMENT ADJUSTMENTS.
5. ____ AMENDMENT OF THE EXISTING PERMIT (S) OR SUBMITTAL OF NEW PERMIT APPLICATION (S) BECAUSE OF MODIFICATIONS OR ALTERNATIONS TO THE EQUIPMENT COVERED.

THIS EXTENSION SHALL NOT BE CONSTRUED TO EXTEND THE COMPLIANCE DATE (S) OF ANY ORDER ISSUED BY OR ENTERED INTO WITH THE DEPARTMENT AS THE RESULT OF AN ADMINISTRATIVE OR JUDICIAL ACTION.

IF WE DO NOT INSPECT THIS EQUIPMENT DURING THIS 90 DAY PERIOD, THIS TEMPORARY CERTIFICATE WILL BE EXTENDED. YOU NEED NOT APPLY FOR SUCH AN EXTENSION.

QUESTIONS ABOUT THIS DOCUMENT SHOULD BE DIRECTED TO THE PERMITS AND CERTIFICATES SECTION AT 609 - 292 - 6716 OR THE ADDRESS BELOW.

NOTE: This document must be readily available for inspection at the source location.

Approved by: William F. Hart
Supervisor
Permits & Certificates Section

N.J. Department of Environmental Protection
Bureau of Air Pollution Control
CN-027
Trenton, New Jersey 08625

1/28/81 dmh

ATTACHMENT M-11

Form VEM-021 T
1/79

NJ #2

S

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
BUREAU OF AIR POLLUTION CONTROL

PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT (90 DAY)

Permit and Certificate Number 0 4 7 7 7 9

DEP Plant ID 45136

(Mailing Address)

Detrex Chemical Industries
P.O.Box 501
Detroit , Michigan

(Plant Location)

Gold Shield Division
835 Industrial Hwy, Unit1
Cinnaminson, Burlington CO.

Applicant's Designation of Equipment ~~#1~~ (#2) ~~Trichloroethylene, 15000 gal tank~~

N.J. Stack No. 0 0 2 No. of Stacks 0 1 No. of Sources 0 0 1

Approval ~~9/18/80~~ Mo. Day Year Start Up ~~9/18/80~~ Mo. Day Year Expiration ~~12/18/80~~ Mo. Day Year

S/S ~~47779~~ 42260

THIS PERMIT AND TEMPORARY CERTIFICATE IS BEING ISSUED UNDER THE AUTHORITY OF CHAPTER 106, P.L. 1967 (N.J.S.A. 26:2C - 9.2). THE TEMPORARY CERTIFICATE WILL ALLOW FOR INSPECTION AND EVALUATION TO ASSURE CONFORMANCE WITH YOUR PERMIT AND WITH ALL OTHER PROVISIONS OF TITLE 7, CHAPTER 27, OF THE NEW JERSEY ADMINISTRATIVE CODE. BASED ON THIS EVALUATION STACK TESTS MAY BE REQUIRED IN ACCORDANCE WITH N.J.A.C. 7:27 - 8.4 (c).

IF WE DO NOT INSPECT THIS EQUIPMENT DURING THIS 90 DAY PERIOD, THIS TEMPORARY CERTIFICATE WILL BE EXTENDED. YOU NEED NOT APPLY FOR SUCH AN EXTENSION.

QUESTIONS ABOUT THIS DOCUMENT SHOULD BE DIRECTED TO THE PERMITS AND CERTIFICATES SECTION AT 609 - 292 - 6716 OR THE ADDRESS BELOW.

NOTE: This document must be readily available for inspection at the source location.

RM 9/18/80

Approved by: William F. Hartwell
Supervisor
Permits & Certificates Section

N.J. Department of Environmental Protection
Bureau of Air Pollution Control
CN-027
Trenton, N.J. 08625

ATTACHMENT M-12

PERMIT-CERTIFICATE REVIEW FORM

P&CT Number 47779 Date Logged 9/18 Stack I.D. 45136-002

Company, Div. DETREX CHEMICAL

Cancel P&CT 42260 Legal Action

Company Designation of Equipment TANK #2

Control Apparatus VAPOR CLOSED LOOP

Prop. Line 140 ft, # __ Fuel used x10^{6}Btu/hr

Stack Diam. 0.9 ft, Type of waste

Stack Ht. 10 ft, Tank Capacity x10^{3}Gallons

Exit temp. 70 °F, Tank Diameter feet

Exit flow 1 cfm, Thruput x10^{3}Gal/year

System use 8760 hr/y, Fill Rate GPM

Attachments to Permit

____Stacks; ____Sources.

EMISSIONS	MW	VP	PPM OTL	PPM Act.	Without Con. #/h	Without Con. T/y	With Con. #/h	With Con. T/y	EFF.	Allowable	NJAC 7:27-
Trichloroethylene					11.97	0.5	0.59	.02			16.1

ADDITIONAL STATEMENTS :

Approval: Evaluator RM 9/18/80 Supv. William F. Hunt

Stack Tests required for :

Approval Date 9/18/80 Duration 90 Expiration 12/18/80 Letter #21

Reasons for Disapproval: Evaluator Date

____1. Insufficient Information

____2. Not State-of-The-Art

____3. Equipment Violates

1. E.O.P.
2. P.S.D.
3. N.S.P.S.
4. NESHAPS
5. EPA-Audit
6. Carcinogen
7. Pineland

ATTACHMENT M-13

Form VEM-003
1/79

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

TO: New Jersey Department of Environmental Protection
Bureau of Air Pollution Control
CN- 027
Trenton, New Jersey 08625

Read Instructions Before Completing Application

SECTION A

1. Full Business Name: Detrex Chemical Industries, Inc.
2. Mailing Address: P. O. Box 501 (No.) (Street) Detroit (City) MI (State) 48232 (Zip Code)
3. Division and/or Plant Name: Gold Shield Division
4. Plant Location: 835 (No.) Industrial Hwy. Unit 1 (Street) Cinnaminson (Municipality) Burlington (County)
5. Location of equipment on premises((Bldg., Dept., area, etc.): Outside/Adjacent to Bldg.
6. Nature of business: Warehouse & Distribution of Industrial Solvents
7. Estimated starting date of construction: Sept. 1980
8. Date equipment to be put in use: Oct. 1980
9. Plant Contact: Dale Russel (Name (Print or type)) Branch Manager (Title) (609) 662-1202 (Telephone No.)

SECTION B

REASON FOR APPLICATION (CHECK ONE)

- ☐ New Equipment without Control Apparatus
- ☐ New Equipment with Control Apparatus
- ☐ New Control Apparatus on Existing Equipment
- ☐ Five Year Renewal of Certificate No. (s)
- ☐ Other (Explain)
- ☒ Modification to Existing Equipment
- ☐ Modification to Existing Control Apparatus
- ☐ Painting Tank White

SECTION C

STACK INFORMATION (EQUIVALENT STACK INFORMATION)

1. Company Designation of Stack (s): ~~#1 (#2A Inside bldg.)~~ TANK NO. 2
2. Previous Certificate Numbers (if any): 42260 9454
3. a. Number of Sources Venting to this Stack: 1 4 (Complete a separate VEM-004 for each source)
   b. Number of Stacks Venting Source Operation (s): 1
4. Distance to the nearest Property Line (ft.): Aprox 100 Feet
5. Stack Diameter (inches): ~~10~~ 2
6. Discharge Height Above Ground (ft.): ~~10~~ 1
7. Exit Temperature of Stack Gases (°F): Ambient
8. Volume of Gas Discharged at Stack Conditions (A.C.F.M.): ~~0.02~~ 7
9. Discharge Direction: ☒ Horizontal ☐ Up ☐ Down

The information supplied on applications VEM-003 and VEM-004, including the data in supplements, is to the best of my knowledge true and correct.

Dale S. Russell
Signature

9/15/80
Date

Dale Russel
Name (Print or type)

Branch Manager
Title

This application will not be processed unless proper fee is submitted.

FOR ASSISTANCE CALL (609) 292-6716

FOR DEPARTMENT USE ONLY

☐☐☐☐☐ - ☐☐☐ - 000 ☐☐☐☐☐☐

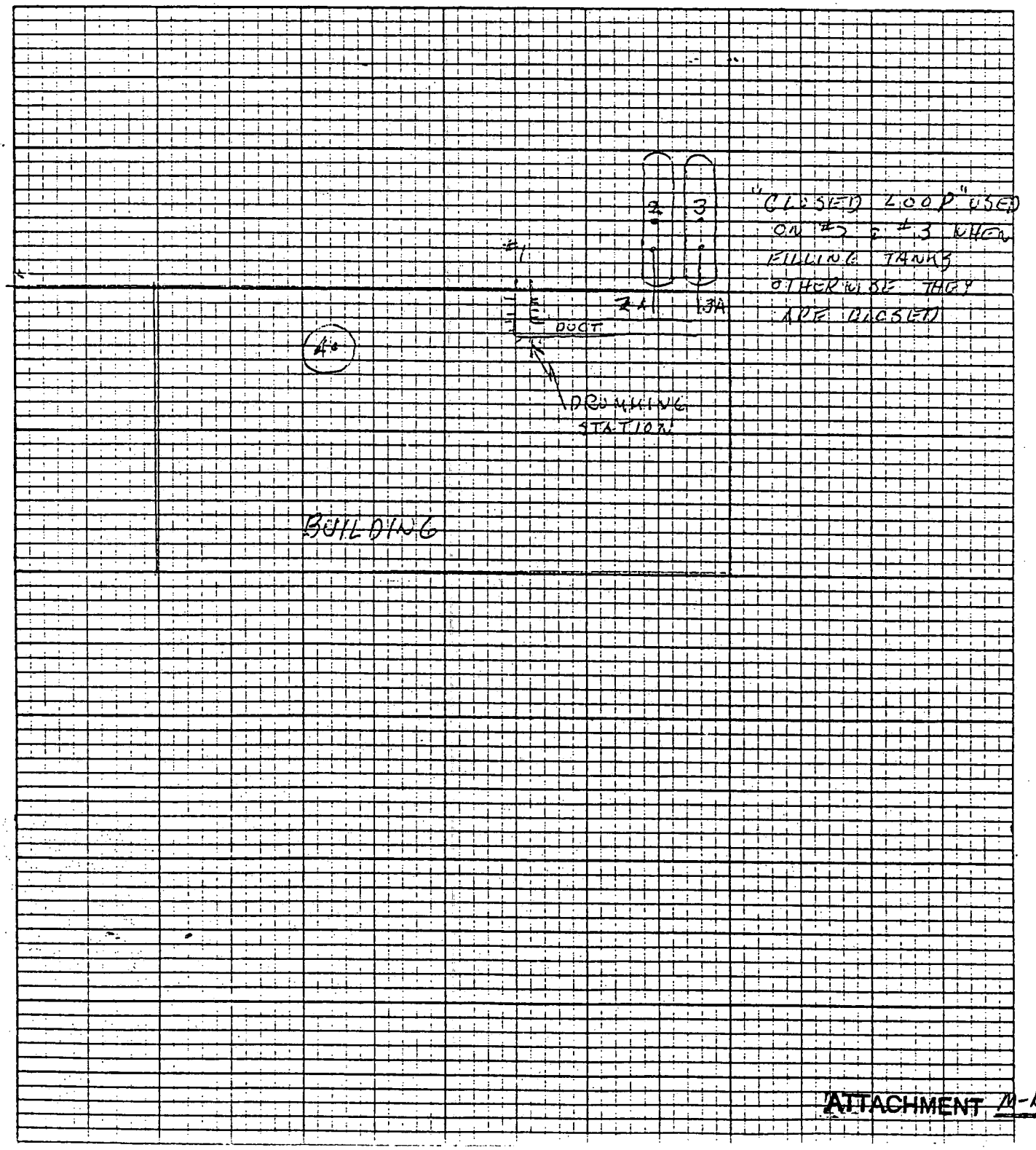
47779

(over)

ATTACHMENT M-14

SECTION D DIAGRAM INSTRUCTIONS - A diagram must be included showing the configuration of all stacks, control apparatus and sources related to this application. NOTE: In cases of multiple stacks, include the following information for each stack: (1) distance to nearest property line, (2) stack diameters, (3) stack height above ground, (4) exit temperature (° F) of stack gases, (5) volume rate of gases (ACFM) discharged at stack conditions, (6) the location and type of control apparatus, (7) direction of flows, and (8) maximum stack emissions.

Diagram



ATTACHMENT M-15

1/79

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form

(Complete this form for each source and submit with application Form VEM-003)

SECTION E

SOURCE INFORMATION

1. Source Description: Storage Tank #2

2. Operating Schedule: 24 Hours/Day; 8760 Hours/Year; Existing — Operation Starting Date

3. % Annual Production Throughput By Quarter: 25 Jan.-Mar.; 25 Apr.-June; 25 July-Sept.; 25 Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): ~~0.02~~ ?; Source Discharge Temperature (°F): Ambient

SECTION F

CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	"Closed-loop" filling of Tk.	Neg.	Neg.	1
Secondary				
Tertiary				

SECTION G

AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
TRICHLOROETHYLENE ~~Trichloroethane~~ (Tk. Filling)	11.97 (83 hrs/yr)	~~Neg.~~ .59	Calculation
TRICHLOROETHYLENE ~~Trichloroethane~~ (breathing)	0.02 ~~(8760 Hrs/yr)~~	0.02	Calculation

TO INSURE PROPER COORDINATION BETWEEN VEM-003 AND VEM-004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM-003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc.

Company Designation of Stack (s): #1 (#2A Inside Bldg.)

(over)

ATTACHMENT M-16

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description _____

2. Total Amount Materials Processed ☐ Batch _____ lb/batch, _____ hr/batch ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6 BTU/HR) _____
2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:		
b. Heating Value (Btu/lb):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

1. Type of Unit _____
2. Constituents of Waste (s) _____
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6
4. Amount Burned (lbs./hr.) _____ Type of Auxil. Fuel (If Any) _____

D. STORAGE FACILITY

1. Tank Contents Trichloroethylene
2. Type of Tank or Bin Fixed Roof Height or Length (Ft.) 25
3. Capacity 15 (10^3 Ft.^{3}) ☐ (10^3 Gal.) ☒ Equivalent or Actual Diameter (Ft.) 10

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) 1.12 Storage Temp. If Not Ambient (°F) Ambient
5. Filling Rate (Gal/Min) 50 Annual Throughput (10^3 Gal/Yr) 250
6. Method of Fill ☐ Top ☐ Bottom ☒ Submerged ☐ Other (Explain Below)
7. Color of Tank ☒ White ☐ Other Exposed to Suns Rays ☒ Yes ~~☐ No~~
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)
   Type _____, Thickness (Inches) _____, Thermal Conductivity (BTU/HR/FT^2/°F) _____

For Department Use Only

☐☐☐☐☐ - ☐☐☐ - ☐☐☐

ATTACHMENT A-17

Form VEM-017
6/83

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM
BUREAU OF ENGINEERING AND TECHNOLOGY

All Correspondence must indicate your DEP PLANT ID NUMBER

Permit/Certificate Number 06/966

DEP PLANT ID 45136

(Mailing Address)

DETREX CHEMICAL INDUSTRIES, INC.
600 INDUSTRIAL HIGHWAY
CINNAMINSON NJ 08077

(Plant Location)

GOLD SHIELD SOLVENTS DIV.
600 INDUSTRIAL HIGHWAY
CINNAMINSON TWP

Applicant's Designation of Equipment EXHAUST STACK
N.J. Stack No. 007 No. of Stacks 001 No. of Sources 06
Original Approval Effective 04/25/84 Expiration 07/10/90

CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT (5 YEAR)

THIS PERMANENT (5 YEAR)-CERTIFICATE IS BEING ISSUED UNDER THE AUTHORITY OF CHAPTER 100, P.L. 1967 (N.J.S.A.26:2C-9.2). THE POSSESSION OF THIS DOCUMENT DOES NOT RELIEVE YOU FROM THE OBLIGATION OF COMPLYING WITH ALL OTHER PROVISIONS OF TITLE 7, CHAPTER 27, OF THE NEW JERSEY ADMINISTRATIVE CODE.

YOU MAY BE ENTITLED TO AN EXEMPTION OF TAXATION IF YOUR EQUIPMENT IS TAXED AND IS CONSIDERED TO BE AN AIR POLLUTION ABATEMENT FACILITY. A TAX EXEMPTION APPLICATION MAY BE OBTAINED FROM THIS SECTION.

IF IT IS NECESSARY TO AMEND YOUR EMERGENCY STANDBY PLANS, PLEASE CONSULT WITH THE APPROPRIATE FIELD OFFICE. (SEE OTHER SIDE).

THIS DOCUMENT MUST BE READILY AVAILABLE FOR INSPECTION AT THE PLANT.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027
Trenton, New Jersey 08625

Approved by: _____
Supervisor
New Source Review Section

ATTACHMENT M-18
04/12/85-04

Form VE 017
6/83

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF ENVIRONMENTAL QUALITY
AIR POLLUTION CONTROL PROGRAM
BUREAU OF ENGINEERING AND TECHNOLOGY

All Correspondence must indicate your DEP PLANT ID NUMBER

Permit/Certificate Number 067966 LOG NUMBER 840202A DEP PLANT ID 45130

(Mailing Address)

DETREX CHEMICAL INDUSTRIES, INC.
835 INDUSTRIAL HIGHWAY
CINNAMINSON NJ 08077

(Plant Location)

GOLD SHIELD SOLVENTS DIV.
835 INDUSTRIAL HIGHWAY
CINNAMINSON TWP

Applicant's Designation of Equipment EXHAUST STACK
N.J. Stack No. 007 No. of Stacks 001 No. of Sources 08
Original Approval Effective 04/25/84 Expiration 07/23/84

PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT (90 DAY)

THIS PERMIT AND TEMPORARY CERTIFICATE IS BEING ISSUED UNDER THE AUTHORITY OF CHAPTER 106, P.L. 1967 (N.J.S.A.26:2C-9.2). THE TEMPORARY CERTIFICATE WILL ALLOW FOR INSPECTION AND EVALUATION TO ASSURE CONFORMANCE WITH YOUR PERMIT AND WITH ALL OTHER PROVISIONS OF TITLE 7, CHAPTER 27, OF THE NEW JERSEY ADMINISTRATIVE CODE. BASED ON THIS EVALUATION STACK TESTS MAY BE REQUIRED IN ACCORDANCE WITH N.J.A.C. 7:27-8.4(C).

IF WE DO NOT INSPECT THIS EQUIPMENT DURING THIS 90 DAY PERIOD, THIS TEMPORARY CERTIFICATE WILL BE EXTENDED. YOU NEED NOT APPLY FOR SUCH AN EXTENSION.

THIS DOCUMENT MUST BE READILY AVAILABLE FOR INSPECTION AT THE PLANT.

N.J. Department of Environmental Protection
Division of Environmental Quality
CN-027
Trenton, New Jersey 08625

Approved by: _____
Supervisor
New Source Review Section

ATTACHMENT M-19
06/22/84-01

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
JOHN FITCH PLAZA, CN027, TRENTON, N.J. 08625

July 31, 1985

Mr. R. E. Swan, Project Engineer
Detrex Chemical Industries, Inc.
P.O. Box #501
Detroit, MI 48232

Reference:		
	Plant ID Number:	45136
	R/CT Number:	67966
	NJ Number:	007
	Amendment Number:	2/85-0266

Dear Mr. Swan:

This is in reply to your letter dated May 31, 1985.

The referenced permit and certificate is amended as a result of your letter. The specific change is as follows:

1. The actual system, as installed, differs from the initial design. The differences include duct sizes, blower size, exhaust volume, elimination of two storage tanks as proposed and a larger carbon adsorption unit.

The VEM-003 and 004 forms which you submitted will be attached to the permit file.

Very truly yours,

William F. Hart, Supervisor
New Source Review Section
Bur. of Engineering & Technology

js
c: ~~SRO~~ ✓
CFO ✓ APEDS

Form VEM-003
12/81

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

RECEIVED JUN 11 1985

TO: New Jersey Department of Environmental Protection
Bureau of Air Pollution Control
CN-027, Trenton, NJ 08625

Read Instructions Before Completing Application

SECTION A

1. Full Business Name: Detrex Chemical Industries, Inc.
2. Mailing Address: P. O. Box 501 (No. Street) Detroit (City) MI (State) 48232 (Zip Code)
3. Division and/or Plant Name: Gold Shield Solvents Division
4. Plant Location: 835 Industrial Highway, Unit #1, Cinnaminson, (No. Street City) NJ (State) 08077 (Zip Code)
5. Location of Equipment on Premises (bldg., dept., area, etc.): Rear of Warehouse
6. Nature of Business: Distribution/Reclamation of Industrial Solvents
7. Estimated Starting Date of Construction: 2/1/84
8. Date Equipment to be put in use: 5/1/84
9. Plant Contact: Mr. Dale S. Russell (Name (print or type)) Branch Manager (Title) (609) 662-1202 (Telephone No.)

SECTION B

REASON FOR APPLICATION *(Check One)*

- ☐ New Equipment without Control Apparatus
- ☐ New Equipment with Control Apparatus
- ☐ New Control Apparatus on Existing Equipment
- ☐ Five Year Renewal of Certificate No. (s)
- ☐ Modification to Existing Equipment
- ☐ Modification to Existing Control Apparatus
- ☐ Painting Tank White
- ☒ Other *(Explain)* Deletion of proposed tanks (2) and increase duct and blower sizes.

SECTION C

STACK INFORMATION (EQUIVALENT STACK INFORMATION)

1. Company Designation of Stack (s): Exhaust System
2. Previous Certificate Numbers (if any): 7658 24398 067966
3. a. Number of Sources Venting to this Stack: 7 . (Complete a separate VEM-004 for each source)
   b. Number of Stacks Venting Source Operation (s): 1
4. Distance to the nearest Property Line (ft.): 62 ft.
5. Stack Diameter (inches): 18" suction and discharge ducts w/12" discharge nozzle
6. Discharge Height Above Ground (ft.): 44 ft.
7. Exit Temperature of Stack Gases (°F): Ambient
8. Volume of Gas Discharged at Stack Conditions (A.C.F.M.): 3000
9. Discharge Directions ☐ Horizontal ☒ Up ☐ Down

The information supplied on applications VEM-003 and VEM-004, including the data in supplements, is to the best of my knowledge true and correct.

Dale S. Russell (Signature) — 5/20/85 (Date)

Dale S. Russell (Name (print or type)) — Branch Manager (Title)

This application will not be processed unless proper fee is submitted. FOR ASSISTANCE CALL (609) 292-6716

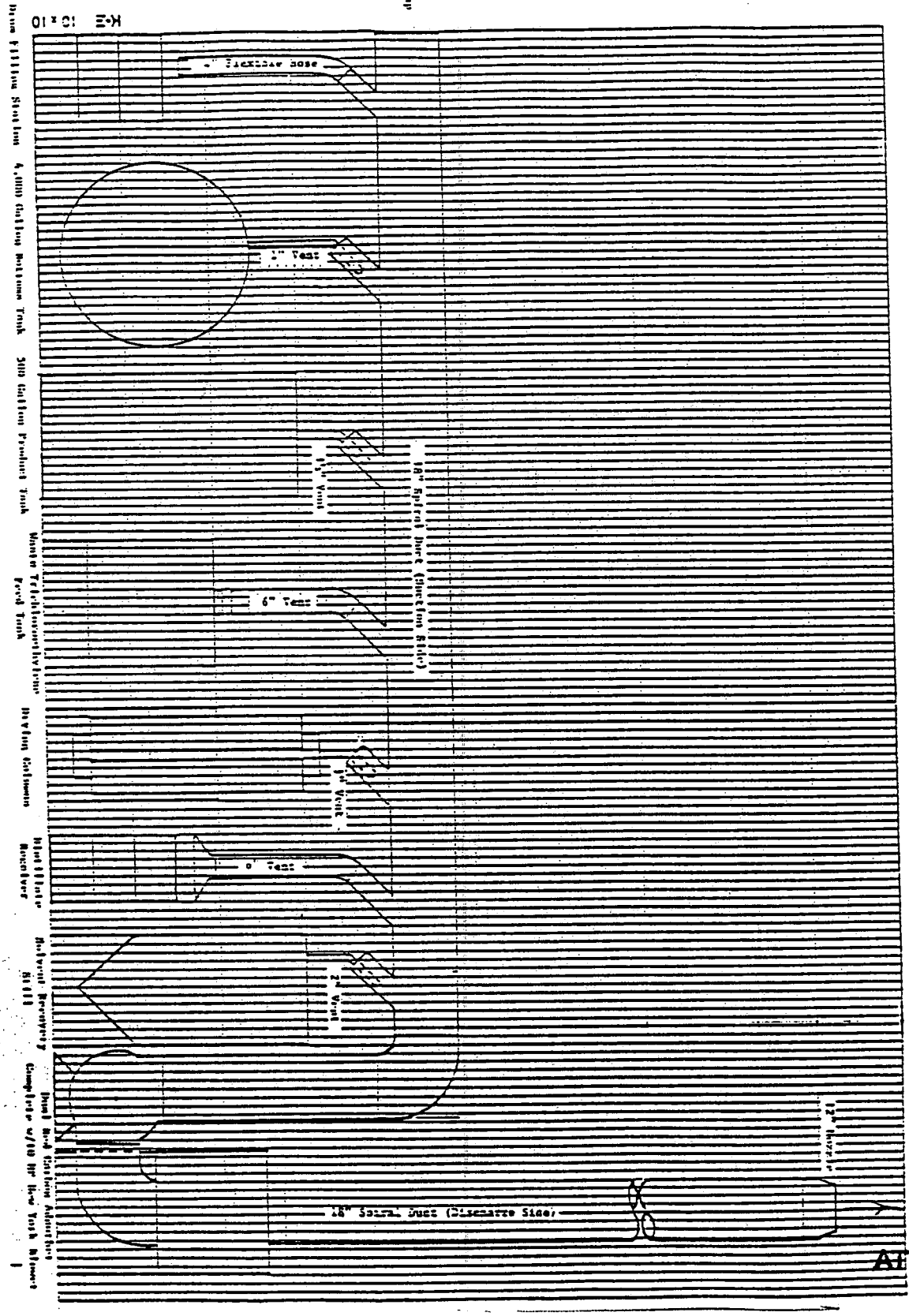
50 PAID William Stephens N.S.R. 7-5-85

FOR DEPARTMENT USE ONLY

N.J.I.D. ☐☐☐☐☐ - STACK ☐☐☐ - 000 LOG NO. 2 85 - 02466 CT. NO. ☐☐☐☐☐☐ FEE 50 EVAL.

ATTACHMENT M-21

SECTION D DIAGRAM INSTRUCTIONS - A diagram must be included showing the configuration of all stacks, control apparatus and sources related to this application. NOTE: In cases of multiple stacks, include the following information for each stack: (1) distance to nearest property line, (2) stack diameters, (3) stack height above ground, (4) exit temperature (° F) of stack gases, (5) volume rate of gases (ACFM) discharged at stack conditions, (6) the location and type of control apparatus, (7) direction of flows, and (8) maximum stack emissions.



ATTACHMENT M-22

Form VEM-004
1/79

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form

(Complete this form for each source and submit with application Form VEM-003)

SECTION E — SOURCE INFORMATION

1. Source Description: Drumming Station

2. Operating Schedule: 1.0 Hours/Day; 100 Hours/Year; Existing — Operation Starting Date

3. % Annual Production Throughput By Quarter: 25% Jan.-Mar.; 25% Apr.-June; 25% July-Sept.; 25% Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): 250; Source Discharge Temperature (°F): 70

SECTION F — CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	Carbon Adsorber	$70,000	$3,000	7
Secondary				
Tertiary				

SECTION G — AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Trichloroethylene	3.62	0.07	Est.

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc. Gold Shield Solvents Division

Company Designation of Stack (s): Exhaust Stack

ATTACHMENT M-23

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description: Drumming

2. Total Amount Materials Processed: ☒ Batch 740 lb/batch, 0.05 hr/batch ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Trichloroethylene	100		

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6 BTU/HR): N/A
2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:		
b. Heating Value (Btu/lb):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

1. Type of Unit: N/A
2. Constituents of Waste (s): _____
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6
4. Amount Burned (lbs./hr.) _____ Type of Auxil. Fuel (If Any) _____

D. STORAGE FACILITY

1. Tank Contents: N/A
2. Type of Tank or Bin _____ Height or Length (Ft.) _____
3. Capacity _____ (10^3 Ft.^{3}) ☐ (10^3 Gal.) ☐ Equivalent or Actual Diameter (Ft.) _____

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) _____ Storage Temp. If Not Ambient (°F) _____
5. Filling Rate (Gal/Min) _____ Annual Throughput (10^3 Gal/Yr) _____
6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)
7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐Yes ☐No
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)
   Type _____, Thickness (Inches) _____, Thermal Conductivity (BTU/HR/FT^2/°F) _____

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ATTACHMENT M-24

Form VEM-004
1/79

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form

(Complete this form for each source and submit with application Form VEM-003)

SECTION E

SOURCE INFORMATION

1. Source Description: Drying Columns

2. Operating Schedule: 40 Hours/Day; 100 Hours/Year; Nov. 1, 1983 Operation Starting Date

3. % Annual Production Throughput By Quarter: 25% Jan.-Mar.; 25% Apr.-June; 25% July-Sept.; 25% Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): 50.9; Source Discharge Temperature (^{0}F): 350

SECTION F

CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	Carbon Adsorber	$70,000	$3,000	8
Secondary				
Tertiary				

SECTION G

AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Trichloroethylene*	2.55	0.051	Est.
1,1,1 Trichloroethane *	2.55	0.130	Est.

*Only one contaminant is discharged per cycle, both are not emitted at once, i.e., emission from source is 2.55 lbs./hr. of either Trichloroethylene or 1,1,1 ~~Trichloroeth~~

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc. Gold Shield Solvents Div.

Company Designation of Stack (s): Exhaust Stack

ATTACHMENT M-25

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description: Drying columns

2. Total Amount Materials Processed: ☒ Batch 36000 lb/batch, 40 hr/batch; ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Trichloroethylene	99 + %	1,1,1 Trichloroethane	99 + %
Water	L.T. 1%	Water	L.T. 1%

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6 BTU/HR): 0.068

2. Type Heat Exchange: ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:	Electrical	
b. Heating Value (Btu/lb):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

1. Type of Unit: N/A

2. Constituents of Waste (s): _____

3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6

4. Amount Burned (lbs./hr.) _____ Type of Auxil. Fuel (If Any) _____

D. STORAGE FACILITY

1. Tank Contents: N/A

2. Type of Tank or Bin _____ Height or Length (Ft.) _____

3. Capacity _____ (10^3 Ft.^{3}) ☐ (10^3 Gal.) ☐ Equivalent or Actual Diameter (Ft.) _____

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) _____ Storage Temp. If Not Ambient (°F) _____

5. Filling Rate (Gal/Min) _____ Annual Throughput (10^3 Gal/Yr) _____

6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)

7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐ Yes ☐ No

8. Insulation Data for Insulated Tanks (Volatile Organic Substances)

Type _____, Thickness (Inches) _____, Thermal Conductivity (BTU/HR/FT^2/°F) _____

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ATTACHMENT M-2E

Form VEM-004
1/79

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT
AND
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form
(Complete this form for each source and submit with application Form VEM-003)

SECTION E

SOURCE INFORMATION

1. Source Description: Trichloroethylene Storage Tank

2. Operating Schedule: 24 Hours/Day; 8760 Hours/Year; Existing — Operation Starting Date

3. % Annual Production Throughput By Quarter: 25 Jan.-Mar.; 25 Apr.-June; 25 July-Sept.; 25 Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): 14; Source Discharge Temperature (^{0}F): 70

SECTION F

CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	Carbon Adsorber	70,000	3,000	7
Secondary				
Tertiary				

SECTION G

AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Trichloroethylene	0.067	0.002	Est.

TO INSURE PROPER COORDINATION BETWEEN VEM- 003 AND VEM- 004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM- 003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc. Gold Shield Solvents Div.

Company Designation of Stack (s): Exhaust Stack

ATTACHMENT M-27

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description: Temporary Product Storage (Trichloroethylene)

2. Total Amount Materials Processed: ☒ Batch 6100 lb/batch, 6.7 hr/batch; ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Trichloroethylene	100		

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6 BTU/HR): N/A

2. Type Heat Exchange: ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:		
b. Heating Value (Btu/lb):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

1. Type of Unit: N/A

2. Constituents of Waste (s): _____

3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6

4. Amount Burned (lbs./hr.) _____ Type of Auxil. Fuel (If Any) _____

D. STORAGE FACILITY

1. Tank Contents: Trichloroethylene

2. Type of Tank or Bin: Carbon Steel Height or Length (Ft.): 6.0 ft.

3. Capacity: 1.00 (10^3 Ft.^{3}) ☐ (10^3 Gal.) ☒ Equivalent or Actual Diameter (Ft.): 5.64 ft.

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA): 1.2 Storage Temp. If Not Ambient (°F): Ambient

5. Filling Rate (Gal/Min): 20 Annual Throughput (10^3 Gal/Yr): 24.59

6. Method of Fill: ☒ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)

7. Color of Tank: ☒ White ☐ Other Exposed to Suns Rays: ☐ Yes ☒ No

8. Insulation Data for Insulated Tanks (Volatile Organic Substances)

Type: None, Thickness (Inches) _____, Thermal Conductivity (BTU/HR/FT^2/°F) _____

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ATTACHMENT M-28

Form VEM-004
1/79

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT
AND
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form

(Complete this form for each source and submit with application Form VEM-003)

SECTION E — SOURCE INFORMATION

1. Source Description: Waste Trichloroethylene Feed Tank

2. Operating Schedule

24	8760	Existing
Hours/Day	Hours/Year	Operation Starting Date

3. % Annual Production Throughput By Quarter

25	25	25	25
Jan.-Mar.	Apr.-June	July-Sept.	Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): 215 — Source Discharge Temperature (^{0}F): 70

SECTION F — CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	Carbon Adsorber	70,000	3,000	7
Secondary				
Tertiary				

SECTION G — AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Trichloroethylene	0.260	0.008	Est.

TO INSURE PROPER COORDINATION BETWEEN VEM-003 AND VEM-004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM-003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc. Gold Shield Solvents Div.

Company Designation of Stack (s): Exhaust Stack

ATTACHMENT M-29

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description: Distillation Unit Feed Tank

2. Total Amount Materials Processed: ☒ Batch 4880 lb/batch, 3.7 hr/batch ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Trichloroethylene	70		
Oils	30		

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6 BTU/HR): N/A
2. Type Heat Exchange ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:		
b. Heating Value (Btu/lb):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

1. Type of Unit: N/A
2. Constituents of Waste (s): _____
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6
4. Amount Burned (lbs./hr.): _____ Type of Auxil. Fuel (If Any): _____

D. STORAGE FACILITY

1. Tank Contents: Spent Trichloroethylene from degreasing operations
2. Type of Tank or Bin: Carbon Steel Height ~~or Length~~ (Ft.): 4'0"
3. Capacity: 0.478 (10^3 Ft.^{3}) ☐ (10^3 Gal.) ☒ Equivalent or Actual Diameter (Ft.): 5'1"

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA): 1.2 Storage Temp. If Not Ambient (°F): Ambient
5. Filling Rate (Gal/Min): 20 Annual Throughput (10^3 Gal/Yr): 35.13
6. Method of Fill ☒ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)
7. Color of Tank ☐ White ☒ Other Exposed to Suns Rays ☐ Yes ☒ No
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)
   Type: None, Thickness (Inches): _____, Thermal Conductivity (BTU/HR/FT^2/°F): _____

For Department Use Only

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ATTACHMENT M-30

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form

(Complete this form for each source and submit with application Form VEM-003)

SECTION E

SOURCE INFORMATION

1. Source Description: Receiver

2. Operating Schedule: 8 Hours/Day; 2000 Hours/Year; Existing — Operation Starting Date

3. % Annual Production Throughput By Quarter: 25 Jan.-Mar.; 25 Apr.-June; 25 July-Sept.; 25 Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): 193; Source Discharge Temperature (^{0}F): 70

SECTION F

CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	Carbon Adsorber	$70,000	$3,000	7
Secondary				
Tertiary				

SECTION G

AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Trichloroethylene*	0.734	0.022	Est.
1,1,1 Trichloroethane*	1.223	0.061	Est.

*Note: Only one contaminant is distilled per cycle, both are not emitted at once, i.e., emissions are 0.734 lb./hr. Trichloroethylene or 1.223 lb/hr 1,1,1 Trichloroethane.

TO INSURE PROPER COORDINATION BETWEEN VEM-003 AND VEM-004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM-003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc. Gold Shield Solvents Div.

Company Designation of Stack (s): Exhaust Stack

ATTACHMENT M-31

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description: Receiver Tank of Distillation Unit

2. Total Amount Materials Processed: ☒ Batch 750 lb/batch, 0.8 hr/batch; ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Trichloroethylene	100	1,1,1 Trichloroethane	100

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6 BTU/HR): N/A
2. Type Heat Exchange: ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:		
b. Heating Value (Btu/lb):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

1. Type of Unit: N/A
2. Constituents of Waste (s): _____
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6
4. Amount Burned (lbs./hr.): _____ Type of Auxil. Fuel (If Any) _____

D. STORAGE FACILITY

1. Tank Contents: Product from Distillation Unit (Trichloroethylene or 1,1,1 Trichloroetha
2. Type of Tank or Bin: Carbon Steel Height or Length (Ft.): 2'4"
3. Capacity: .055 (10^3 Ft.^{3}) ☐ (10^3 Gal.) ☒ Equivalent or Actual Diameter (Ft.): 2'0"

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA): 1.2 & 1.9 resp. Storage Temp. If Not Ambient (°F): Ambient
5. Filling Rate (Gal/Min): 1.15 Annual Throughput (10^3 Gal/Yr): 24.59
6. Method of Fill: ☒ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)
7. Color of Tank: ☐ White ☒ Other Exposed to Suns Rays: ☐ Yes ☒ No
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)
   Type: None, Thickness (Inches): _____, Thermal Conductivity (BTU/HR/FT^2/°F): _____

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ATTACHMENT M-32

Form VEM-004
1/79

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR
PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT
AND
CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form

(Complete this form for each source and submit with application Form VEM-003)

SECTION E

SOURCE INFORMATION

1. Source Description: Still (Distillation Unit)

2. Operating Schedule: 8 Hours/Day; 2000 Hours/Year; Existing Operation Starting Date

3. % Annual Production Throughput By Quarter: 25 Jan.-Mar.; 25 Apr.-June; 25 July-Sept.; 25 Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): 21; Source Discharge Temperature (°F): 90°F

SECTION F

CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	Water Cooled Condenser Coils High Level	$800.00	1,000.	1
Secondary	Vapor Control	$ 85.00	10.	1
Tertiary	Carbon Adsorber	$70,000.	3,000	7

SECTION G

AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Trichloroethylene*	0.101	0.003	Est.
1,1,1 Trichloroethane*	0.168	0.008	Est.

*Note: Only one component is distilled per batch, i.e., either Trichloroethylene or 1,1,1 Trichloroethane.

TO INSURE PROPER COORDINATION BETWEEN VEM-003 AND VEM-004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM-003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc. Gold Shield Solvents Div.

Company Designation of Stack (s): Exhaust Stack

ATTACHMENT M-3

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description: Recovery of chlorinated solvents via distillation

2. Total Amount Materials Processed: ☒ Batch 4800 lb/batch, 3.7 hr/batch; ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Trichloroethylene	70	1,1,1 Trichloroethane	70
Oil	30	Oils	30

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6BTU/HR): 565
2. Type Heat Exchange: ☐ Direct ☒ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:	Steam	
b. Heating Value (Btu/lb):	1000	
4. Method of Firing:	Gas fired boiler	
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.	0.712 x 10^6 ft. 3	

Units: Solid Fuel (Tons) Liquid Fuel (10^3Gal.) Gaseous Fuel (10^6Ft.^{3})

C. INCINERATION

1. Type of Unit: N/A
2. Constituents of Waste (s): _____
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6
4. Amount Burned (lbs./hr.): _____ Type of Auxil. Fuel (If Any) _____

D. STORAGE FACILITY

1. Tank Contents: N/A
2. Type of Tank or Bin _____ Height or Length (Ft.) _____
3. Capacity _____ (10^3Ft.^{3}) ☐ (10^3Gal.) ☐ Equivalent or Actual Diameter (Ft.) _____

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA) _____ Storage Temp. If Not Ambient (°F) _____
5. Filling Rate (Gal/Min) _____ Annual Throughput (10^3Gal/Yr) _____
6. Method of Fill ☐ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)
7. Color of Tank ☐ White ☐ Other Exposed to Suns Rays ☐Yes ☐No
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)
   Type _____, Thickness (Inches) _____, Thermal Conductivity (BTU/HR/FT^2/°F) _____

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ATTACHMENT M-34

Form VEM-004
1/79

Side 1

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR POLLUTION CONTROL

APPLICATION FOR PERMIT TO CONSTRUCT, INSTALL OR ALTER CONTROL APPARATUS OR EQUIPMENT AND CERTIFICATE TO OPERATE CONTROL APPARATUS OR EQUIPMENT

Source Emissions And Source Data Form

(Complete this form for each source and submit with application Form VEM-003)

SECTION E

SOURCE INFORMATION

1. Source Description: 4000 Gallon Bottoms Tank

2. Operating Schedule: 24 Hours/Day; 8760 Hours/Year; Existing Operation Starting Date

3. % Annual Production Throughput By Quarter: 25 Jan.-Mar.; 25 Apr.-June; 25 July-Sept.; 25 Oct.-Dec.

4. Volume Of Gas Discharged From This Source (ACFM): 4 (max); Source Discharge Temperature (^{0}F): Ambient

SECTION F

CONTROL APPARATUS ON SOURCE

		Capital Cost (Dollars)	Annual Operating Cost (Dollars)	No. of Sources Connected
Primary	Carbon Adsorber	$70,000	3,000	7
Secondary				
Tertiary				

SECTION G

AIR CONTAMINANTS FROM SOURCE

CONTAMINANT NAME	Emissions w/o Control (lbs./hr.)	Emissions with Control (lbs./hr.)	How Determined
Trichloroethylene	0.003	0.003	Est.

TO INSURE PROPER COORDINATION BETWEEN VEM-003 AND VEM-004 FORMS, INSERT IDENTICAL COMPANY NAME AND DESIGNATION OF STACK FROM VEM-003, SIDE 1.

Full Business Name: Detrex Chemical Industries, Inc. Gold Shield Solvents Div.

Company Designation of Stack (s): Exhaust Stack

ATTACHMENT M-35

SECTION H

A. MANUFACTURING AND MATERIALS HANDLING

1. Process Description: Storage Tank for Still Bottoms

2. Total Amount Materials Processed: ☐ Batch _____ lb/batch, _____ hr/batch ☐ Continuous _____ lb/hr

3. Raw Materials	% By Wt.	Raw Materials	% By Wt.
Trichloroethylene	15% (max)		
Oils	85% (Min)		

B. FUEL BURNING EQUIPMENT

1. Gross Heat Input (10^6 BTU/HR): N/A
2. Type Heat Exchange: ☐ Direct ☐ Indirect ☐ Internal Combustion Engine

	PRIMARY FUEL	SECONDARY FUEL
3. a. Type of Fuel:		
b. Heating Value (Btu/lb):		
4. Method of Firing:		
5. % Sulfur in Fuel (Dry):		
6. % Ash Content of Fuel (Dry):		
7. Amount Burned/Yr.		

Units: Solid Fuel (Tons) Liquid Fuel (10^3 Gal.) Gaseous Fuel (10^6 Ft.^{3})

C. INCINERATION

1. Type of Unit: N/A
2. Constituents of Waste (s): _____
3. Waste Code ☐0 ☐1 ☐2 ☐3 ☐4 ☐5 ☐6
4. Amount Burned (lbs./hr.) _____ Type of Auxil. Fuel (If Any) _____

D. STORAGE FACILITY

1. Tank Contents: Trichloroethylene and Oil Sludge (15%/85%)
2. Type of Tank or Bin: Carbon Steel Height or Length (Ft.): 20
3. Capacity: 4 (10^3 Ft.^{3}) ☐ (10^3 Gal.) ☒ Equivalent or Actual Diameter (Ft.): 6

THE REMAINING QUESTIONS ARE TO BE ANSWERED ONLY FOR LIQUID STORAGE

4. Vapor Pressure at 70°F (PSIA): 0.20 Storage Temp. If Not Ambient (°F): Ambient
5. Filling Rate (Gal/Min): 25 Annual Throughput (10^3 Gal/Yr): 20
6. Method of Fill ☒ Top ☐ Bottom ☐ Submerged ☐ Other (Explain Below)
7. Color of Tank ☒ White ☐ Other Exposed to Suns Rays ☐ Yes ☒ No
8. Insulation Data for Insulated Tanks (Volatile Organic Substances)
   Type: None, Thickness (Inches) _____, Thermal Conductivity (BTU/HR/FT^2/°F) _____

For Department Use Only

☐☐☐☐☐ - ☐☐☐ - ☐☐☐

ATTACHMENT M-36

DETREX CHEMICAL INDUSTRIES, INC.

P.O. BOX 501, DETROIT, MICHIGAN 48232

TELEPHONE
(313)358-5800

TWX 810-224-4756

May 31, 1985

New Jersey Dept. of Environmental Protection
Bureau of Air Pollution Control
CN-027, Trenton, NJ 08625

Attention: Mr. Bill Hart

Dear Mr. Hart:

As per our telephone conversation of Tuesday, May 28, I am enclosing the forms VEM-003 and VEM-004 corrected to depict the actual exhaust system at our Cinnaminson facility (as opposed to the initial design). As I mentioned during our telephone conversation, the only items which have been changed are the exhaust duct sizes, blower size, exhaust volume and elimination of two proposed storage tanks due to the larger carbon adsorption unit which was delivered to the facility. (Please note that the amount of TVOS remains unchanged).

I have also enclosed a check in the amount of $50.00 for processing the amended permit application for our exhaust system (present permit number 067966, plant I.D. number 45136).

If you have any questions or require additional information, please feel free to contact me at the above number.

Sincerely yours,

R. E. Swan
Project Engineer

REW/smb

Encl.

285-0266

2- Logged 6/14/85
FAH

PAID TO
William Stephens
N.S.R. 3-5-86

ATTACHMENT M-37

Preliminary Assessment

for

RCRA Corrective Action Program

GOLD SHIELD DIVISION
DETREX CHEMICAL INDUSTRIES, INC.
835 INDUSTRIAL HIGHWAY
CINNAMINSON, NJ 08077

N. J. Department of Environmental Protect
Divisions of Environmental Quality
Waste Management
Water Resources

Prepared by the Division of Waste Manager
Bureau of Hazardous Waste Planning &
Classification

6 ATTACHMENT N-1

GOLD SHIELD DIVISION
DETREX CHEMICAL INDUSTRIES, INC.
835 INDUSTRIAL HIGHWAY
CINNAMINSON, NJ 08077

Gold Shield Division of Detrex Chemical Industries, Inc., is located in Cinnaminson, Burlington County, New Jersey (Attachment I). Gold Shield distributes, recycles, and recovers chlorinated solvents. Solvents are sold to customers for use in degreasing operations. It has been permitted as a RCRA non-major hazardous waste transfer, treatment, and container and tank storage facility since October 17, 1985 (Attachment II).

Gold Shield has been leasing and operating at this 8000 sq. ft/0.18 acre, macadam covered site since 1972. The facility is located in an Industrial Complex with approximately 22 industries and 80 residential properties within a 1000 foot radius. Gold Shield is not located within the 100 year flood boundary of any waterway. Prior land/building use has not been identified in the file review.

Two (2) RCRA solid waste management units (SWMU) exist at Gold Shield: a container storage unit and a tank storage unit which includes a solvent (trichloroethylene) recycling-recovery operation. With the exception of two outside product storage tanks, all Gold Shield activities occur inside the one and only on-site building. The entire interior of the building, excluding the office, is contained by a three (3) inch berm. The containment system capacity measures 10,000 gallons. The concrete floor has no drains, and minor spills are removed by the use of absorbent materials. Large spills are pumped into 55 gallon drums.

The following waste chlorinated solvents (F001 and F002) are accepted and stored for transfer to other facilities for recovery and disposal: 1,1,1-trichloroethane, methylene chloride, perchloroethylene, trichlorotrifluoroethane, and trichloroethylene (F002). Trichloroethylene (F001) is the only spent halogenated solvent that Gold Shield is authorized to accept, store, and treat. F001 designates waste source from degreasing operations that used chlorinated solvents, other than trichloroethylene. Estimated annual quantities number 350,000 lbs/year. F002 waste source is from solvent recovery stills, and F002 waste numbers approximately 200,000 lbs/year.

The hazardous waste container storage unit, SWMU-1, consists of two (2) separate storage areas which are located inside the Gold Shield building (Attachment III). SWMU -1A consists of all incoming 55 gallon drums which are sampled to determine solvent content. The maximum amount of spent solvent which is accepted for treatment or transfer is 16,5000 gallons (300-55 gallons drums). Drums with sufficient waste solvent (F001) that is from a degreasing operation that used chlorinated solvents, other than trichloroethylene, are stored at SWMU-1B. These are stored until approximately 70-80 drums have

ATTACHMENT N-1

accumulated, at which time, they are shipped to another facility for recovery and disposal.

SWMU-2 consists of three (3) hazardous waste tanks. Incoming drums containing waste from a customer's solvent recovery still (F002) are pumped via a drum pump directly into a 4,000 gallon capacity, bulk, still bottom storage tank, SWMU-2A (Attachment III). It is held for off-site disposal via incineration.

F001 material (degreasing operation waste) which contains trichloroethylene is pumped from the 55 gallon drums into a 500 gallon feed tank, SWMU-2B. From the feed tank, the waste is pumped into a distillation tank (1000 gallons/day capacity), SWMU-2C, in which trichloroethylene is recovered. The still bottoms/ spent solvent sludge from the distillation process are pumped into the 4,000 gallon capacity tank, SWMU-2A (Attachments III and IV).

Summary of Prior/Ongoing Departmental Activities

Gold Shield has been permitted as a RCRA non-major hazardous waste transfer, treatment, and container and tank storage facility since October 17, 1985. Two air permits exist for two outside product storage tanks, and one permit exists for trichloroethylene emissions from distillation operations (Attachment V). Since November, 1985, Gold Shield has not operated its recovery-recycling process for trichloroethylene, due to its compliance with a "Cease and Desist Order" from the Township of Cinnaminson (Attachment VI).

Gold Shield has had a history of compliance with NJDEP concerning regulatory actions. File review revealed one reported spill in 1984, in which approximately one pint of liquid waste spilled onto the interior floor. It was cleaned up according to established procedures. There have been no other identified documented releases of hazardous wastes. NJDEP inspections occur twice a month.

FINDINGS

The major findings of the PA are:

1. There have been no documented releases of hazardous wastes, with the exception of approximately one pint of waste spilled in 1984 inside the Gold Shield building.

2. Gold Shield has been permitted as a RCRA non-major hazardous waste transfer, treatment, and container and tank storage facility since October 17, 1985.

3. Since November, 1985, Gold Shield has only operated as a hazardous waste transfer and storage facility, due to its compliance with a "Cease and Desist Order" from the Township of Cinnaminson.

ATTACHMENT N-3

4. The following waste chlorinated solvents (F001 and F002) are accepted and stored for transfer: 1,1,1 -trichloroethylene, methylene chloride, perchloroethylene, trichlorotrifluoroethane, and trichloroethylene (F002).

5. Trichloroethylene (F001) is the only spent solvent that the facility is authorized to accept, store, and treat.

6. Two (2) SWMUs exist at Gold Shield: a container storage unit and a tank storage unit.

7. Two air permits exist for two (2) outside product storage tanks, and one (1) exists for trichloroethylene emissions from distillation processes.

8. NJDEP site inspections occur twice a month.

RECOMMENDATIONS

Documented prior releases of hazardous wastes have been limited to a minor spill (approximately one pint) in 1984, which occurred inside the Gold Shield building. It was remediated, according to established procedures.

Since all hazardous waste related operations occur inside the facility building, there exists low potential for releases. Air releases are addressed under the air permits. There is insufficient data, however, on prior land use to determine past releases.

No remedial investigation is warranted. All actions taken by EPA should be coordinated with NJDEP.

PR53:bag

ATTACHMENT N-4

TO: [illegible]

FROM: [illegible]

DATE: June 26, 1986

SUBJECT: Detrex Chemical Industries, Inc.

This facility is presently not processing any waste trichloroethylene due to a Cease and Desist order from Cinnaminson Township. They are only accepting waste for transfer. The Cease and Desist is presently being litigated in the local court. According to the facility manager the Township did not respond to the public comment part of the permit process. When the permit was issued the Township responded with the Cease and Desist order.

This facility is routinely inspected on a bi-weekly basis and has an excellent housekeeping and record-keeping history. This inspection revealed three violations 7:26-9.4(g)2 failure to conduct semi-annual drills, 7:26-9.1(f)5 failure to have facility inspected twice a year by local Fire Department and 7:26-3.4(h) failure to mark the capacity of the vehicle on their DEP registered trucks.

Dale Russell the facility manager has attempted on numerous occasions to have the local volunteer Fire Department visit the facility. He has never received a reply from them. Copies of his letters to the local Fire Department are attached to this report. Dale Russell was advised by me to apply to DEP Engineering for a waiver on the above two regulations. I do not

CONFIDENTIAL – RECOMMENDATIONS

TO: File Thru Linda Jordan

FROM: William Barasky

DATE: June 26, 1986

SUBJECT: Le Tree Chemical Industries, Inc

recommend any enforcement action on the two violations 7:26-9.4(a) & and 7:26-9.6(f) &. I do recommend enforcement action on 7:26-3.4(h).

ATTACHMENT O-2

Summary of Findings

Facility Description and Operations

This facility is a State permitted Commercial hazardous waste TSD, permit # 0308 D. The permit was issued Oct 17 1985. The facility is located within a 6,000 sq ft. of a leased warehouse in an industrial / residential area of Cinnaminson.

This Metrex Chemical Industries Inc. is engaged in the distribution, recycling and recovery of Chlorinated solvents. Waste Trichloroethylene is recycled and recovered at this Cinnaminson plant, while other Chlorinated solvents are stored until sufficient drums have been accumulated for shipment to another Gold Shield division of Metrex for recovery and disposal. This Gold Shield Division of Metrex Chemical Industries removes only sludges from degreasing operations generated by customers to whom they sell degreasing solvents.

Waste chlorinated solvents are received in closed steel drums only and stored in designated areas inside a building on a concrete floor that has no drains. The material received for storage and transfer to other authorized treatment, storage or disposal facilities consist of 1,1,1 trichloroethane, Methylene Chloride,

(over)

ATTACHMENT O-3

Summary of Findings

Facility Description and Operations

Perchloroethylene and Trichlorotrifluoroethane Trichloroethylene is received for storage and recycling. Maximum container storage of hazardous waste is 11,500 gallons (300 fifty five gallon drums). The maximum tank storage of hazardous waste 25,000 gallons. The one permitted steam-heated water cooled chlorinated solvent distillation unit has an output of approximately 1,000 gallons per day.

The contaminated solvents are put in steel drums by the customer picked up by the facility truck and transported back to the facility for storage or recovery.

As part of this inspection a sample was taken from a fifty five gallon drum of waste trichloroethylene that was in storage at the facility. The generator of the waste was the Edison Products Company. (See attached field sampling data sheet). The sample was taken to the S R analytical Company in Cherry Hill and an analysis was requested for flash, BS+W trichloroethylene and PCBs. A chain of custody was started, a copy is attached to report.

CONFIDENTIAL – RECOMMENDA

TO: LINDA JORDAN

FROM: DOUG GREENFIELD

DATE: OCTOBER 29, 1986

SUBJECT: DETREX 835 INDUSTRIAL HWY, CINNAMINSON, BURLINGTON,
NJD 047318043

This facility was found to be in compliance. They were only a transfer facility for the last year but started up their still for recovering trichloroethylene.

The company put in a carbon filter system on the still which had been running without one for years and just discharging out the side of the building. When the stack for the filter was constructed the neighbors complained and had the facility shutdown. They are running the operation now until a court ruling is handed down on the suit the Township has against the State for issuing the operating permit.

ATTACHMENT 0-5

SUMMARY OF FINDINGS

FACILITY DESCRIPTION AND OPERATIONS

This facility is engaged in the distribution, recycling, and recovery of Chlorinated solvents. Waste trichloroethylene (F001) is recycled and recovered at this site while other chlorinated solvents (F001 & F002) are stored until a sufficient number of drums are accumulated for shipment to other facilities for recycling and disposal. The distillation of trichloroethylene produces still bottoms which are stored in a 5000 gal tank. This is shipped to a TSDF for disposal with other stored drums of trichloroethylene (F002), Methyl Chloride (F002) Perchloroethylene (F002), 111 trichloroethane (F002), and Trichloro trifluoroethylene (F002). The F001 is shipped to another Detrex plant for recycling.

This facility is also a registered transporter as it distributes new solvent and picks up spent solvent from its customers. At the end of September 1986 Detrex started this still up for the recycling of trichloroethylene (F001) which was shut down due to a Cease & Desist Order by Cinnaminson Township. The case has not been resolved but the court has told Detrex they may run the still until a ruling has been handed down.

Date of Inspection Feb 4, 1987

HW/EF No.

...= Detrex

...o. NJD047318043

...ments, observations, summary

1. Since my Jan 27th inspection 1261 gals of trichloroethylene [?] has been reclaimed.

2. Dale Russell informed me that Cinnaminson Twp has been attempting to shut down all hazardous waste ~~material~~ activity (JHM). Today officials in Detroit have ~~[illegible]~~ plans (JHM) to offer the Twp a compromise: Detrex would not run the still, but ~~[illegible]~~ continue to (JHM) accept waste. A respons from the Twp is expected next month if this proposal is offere

3. Still was operating during my visit

4. Engineering has been notified of comment #2 and has asked that a letter from Detrex be sent notifying them when the still is no longer in operation. No changes in the permit would be made.

Jennifer Morgan [?]

Signature of Inspector

Dale S. Russell

Signature of Facility Representative

ATTACHMENT O-7

SUMMARY OF FINDINGS

FACILITY DESCRIPTION AND OPERATIONS

This facility is engaged in the distribution, recycling, and recovery of Chlorinated solvents. Waste trichloroethylene (F001) is recycled and recovered at this site while other chlorinated solvents (F001 & F002) are stored until sufficient number of drums are accumulated for shipment to other Interex facilities for recycling and disposal. The distillation of trichloroethylene produces still bottoms which are stored in a 4000 gal. Tank. This is shipped to a TSDF for disposal with other stored solvent drums of Trichloroethylene (F002), Methyl Chloride (F002), Perchloroethylene (F002) 111 trichloroethane (F002, and trichlorotrifluoroethylene (F002) F001 is shipped to another facility for recycling.

This facility is also a registered Transporter as it distributes new solvent and picks up spent solvent from its customers

At the end of September 1986 the company started the still back up for reclaimer (F001) after major renovations were completed. The still ran until May 1987 and has been down since.

ATTACHMENT O-8

CONFIDENTIAL - RECOMMENDATIONS

TO: LINDA JORDAN

FROM: DOUGLAS GREENFIELD DATE: JULY 29, 1988

SUBJECT: DETREX 835 INDUSTRIAL HWY, CINNAMINSON, BURLINGTON
NJD 047318043

This facility was found to be in compliance. They are only acting as a transfer facility for over a year. After making improvement to their recycling still they ran it for 8 months and shut it down in May of 1987.

All material that is brought in from customers (spent solvents F001 & F002) is reclaim shipped out with no operations on site. One reason for this action is economics which the company feels it is cheaper and they will handle a generators H.W at one location.

ATTACHMENT 0-9

Name DETREX

ID No. NJD047318073

HW, E

Comments, observations, summary:

1) All paperwork in compliance

2) Minor spill of trichloroethylene on 8-4-88 which was reported on 8-6-88 was cleaned up using oil dri not water as reported. Drummed material on site to be shipped out. Reported by first employee.

Douglas Greenfield
Signature of Inspector

Signature of Facility Representative

ATTACHMENT 0-10

Form DEQ-062
10/84

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF ENVIRONMENTAL QUALITY
BUREAU OF FIELD OPERATIONS

FIELD INVESTIGATION ASSIGNMENT REPORT

TYPE OF INVESTIGATION REQUIRED	INSPECTOR ASSIGNED (Code No.)	DATE ASSIGNED	REQUIRED COMPLETION DATE	ACTUAL COMPLETION DATE	COUNTY	NO.	SUBCHAPTER	UNITS/ TIME	INSPECTOR'S INITIALS
☒ COMPLAINT ☐ ORDER/NOP COMPLIANCE ☐ APEDS ☐ OTHER	LEMBO	2-19-87	3-19-87	4-21-87	BLCO.	1	5	20	KL

COMPLAINT

Date Rec'd 2-18-87
Time 1430 NES
Tel. No. 609-786-1444
Name RICK DREIFERT & JOHN EATON
Address 835 IND. WAY CINNAMINSON UNIT #2
IO #45136

Name and Address of Alleged Violator DETREX CHEM. IND 835 IND. WAY CINNAMINSON UNIT #1
Nature of Violation SOLVENT ODORS
Recorded by J. DeFiore

Complaint Investigation Results:
Date: 4/20
Time: 2:30
Verified:
☐ Yes ☒ No

OBSERVATIONS: SPOKE WITH COMPLAINANTS IN PERSON ON 4-20-87 WITH REGARDS TO INTERMITTENT ODORS ENTERING BUILDING. COMPLAINANTS INFORMED ME THAT ON OCCASION ODORS COME INTO THEIR BUILDING THROUGH A CINDERBLOCK WALLE WHICH SEPARATES THEM FROM DETREX CHEMICAL. I DID NOT DETECT ODORS WITHIN COMPLAINANTS BUILDING OR WITHIN DETREX - SINCE DETREX WAS NOT OPERATING. I REFERED TH PROBLEM TO OSHA, AND THEY WI TRY & DEAL WITH THE PROBLEM INFORMED COMPLAINANTS TO CALL MY OFFICE AS SOON AS ODORS OCCUR AGAIN

ORDER, NOP, A.C.O. COMPLIANCE

Company
Location
NJAC 7:27
Compliance *(If no, give reason)*
Order, NOP, A.C.O. Dated:
Log No.
A.C.O. Item:

APEDS

Company
Location
Inspect Stack No.
Cycle ____ A1 ____ A2 ____ NSPS ____ NESHAPS ____ PSD ____

OTHER

Company
ID No. ____ Location ____
Type of Inspection/Activity
Results

RECOMMENDATIONS:

follow up on future complaints.

Supervisor's Review
Initials: LJ Date: 4-21-87

ATTACHMENT 1

HC-019-87

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF HAZARDOUS WASTE MANAGEMENT

John J. Trela, Ph.D., Acting Director
401 East State St.
CN 028
Trenton, N.J. 08625
609 - 633 - 1408

MAY 4 1987

IN THE MATTER OF	NOTICE OF CIVIL ADMINISTRATIVE
DETREX CHEMICAL INDUSTRIES, INC	PENALTY ASSESSMENT
835 INDUSTRIAL HIGHWAY	
CINNAMINSON, NEW JERSEY 08077	
ATTENTION: DALE RUSSELL	
FACILITY REGIONAL MGR.	

This Notice of Civil Administrative Penalty Assessment is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter "NJDEP" or the "Department") by N.J.S.A. 13:1D-1 et seq. and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and duly delegated to the Assistant Director for Enforcement of the Division of Hazardous Waste Management pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1) The Department has determined that Detrex Chemical Industries, Inc. (hereinafter "Detrex") is operating a hazardous waste facility (EPA ID #NJD047318043) as defined by N.J.A.C. 7:26-1.4 and is located at Block 507, Lot 5.01, 835 Industrial Highway, Cinnaminson Township, Burlington County, State of New Jersey.

2) During an inspection conducted by Departmental personnel on November 12, 1986, it was noted that Detrex failed to comply with paragraph 16(b) of its Hazardous Waste Facility Permit. Paragraph 16(b) of the Hazardous Waste Permit states that each representative sample must be analyzed for solvent type and solvent content by using the specific gravity method or the Boiling Point method. By using the gas chromatography method to analyze each representative sample, Detrex violated N.J.A.C. 7:26-12.4(a)1.

3) By letter dated November 14, 1986, Detrex notified the Department that they had attained compliance with paragraph 16(b) of their Hazardous Waste Facility Permit.

ATTACHMENT 9-1

4) Based on the facts set forth in these FINDINGS, the Department has determined that Detrex has violated the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and the regulations promulgated pursuant thereto, N.J.A.C. 7:26-1 et seq., specifically N.J.A.C. 7:26-12.4(a)1.

NOTICE OF CIVIL ADMINISTRATIVE PENALTY ASSESSMENT

5) Pursuant to N.J.S.A. 13:1E-9e and based upon the above FINDINGS, the Department has determined that a civil administrative penalty should be assessed against Detrex in the amount of $500.

6) Payment of the penalty is due when a final order is issued by the Commissioner subsequent to a hearing, if any, or when this Notice of Civil Administrative Penalty Assessment becomes a final order (see following paragraph). Payment shall be made by certified check payable to "Treasurer, State of New Jersey" and shall be submitted to:

Assistant Director for Enforcement
Division of Hazardous Waste Management
401 East State Street
CN 028
Trenton, NJ 08625

7) If no request for a hearing is received within twenty (20) calendar days from receipt of this Notice of Civil Administrative Penalty Assessment, it shall become a final order upon the twenty-first calendar day following its receipt and the penalty shall be due and payable.

NOTICE OF RIGHT TO A HEARING

8) Pursuant to N.J.S.A 52:14B-1 et seq. and N.J.S.A. 13:1E-9, Detrex is entitled to an administrative hearing. Any hearing request shall be delivered to the address referenced in paragraph 6 within twenty (20) calendar days from receipt of this Notice of Civil Administrative Penalty Assessment.

9) Pursuant to N.J.S.A. 52:14B-9(b) and N.J.A.C. 1:1-6.1(b), Detrex shall, in its request for a hearing, furnish NJDEP with the following:

a. A statement of the legal authority and jurisdiction under which the hearing or action to be taken is to be held;

b. A reference to the particular sections of the statutes and rules involved;

c. A short and plain statement of the matters of fact and law asserted; and

d. The provisions of this Notice of Civil Administrative Penalty Assessment to which Detrex objects, the reasons for such objections, and any alternative provisions proposed.

GENERAL PROVISIONS

10) This Notice of Civil Administrative Penalty Assessment is binding on Detrex, its principals, directors, officers, agents, successors, assigns, any trustee in bankruptcy or other trustee, and any receiver appointed pursuant to a proceeding in law or equity.

11) Notice is given that violations of any statutes, rules or permits other than those herein cited may be cause for additional enforcement actions, either administrative or judicial. By issuing this Notice of Civil Administrative Penalty Assessment the Department does not waive its rights to initiate additional enforcement actions.

12) No obligations imposed by this Notice of Civil Administrative Penalty Assessment (with the exception of paragraph 5, above) are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of New Jersey, intended to protect the public health, safety, welfare and environment.

13) Notice is given that pursuant to N.J.S.A. 13:1E-9e, the Department is authorized to assess a civil administrative penalty of not more than $25,000.00 for each violation and additional penalties of not more than $2,500.00 for each day during which the violation continues after receipt of an administrative order from the Department.

14) Notice is further given that pursuant to N.J.S.A. 13:1E-9f, any person who violates N.J.S.A. 13:1E-1 et seq. or any code, rule or regulation promulgated thereunder shall be liable to a penalty of not more than $25,000.00 per day of such violation, and each day's continuance of the violation shall constitute a separate violation.

15) Notice is further given that pursuant to N.J.S.A. 13:1E-9f, any person who violates an administrative order issued pursuant to N.J.S.A. 13:1E-9c, or a court order issued pursuant to N.J.S.A. 13:1E-9d, or who fails to pay a civil administrative penalty in full after it is due shall be subject upon order of a court to a civil penalty not to exceed $50,000.00 per day of such violation and each day's continuance of the violation shall constitute a separate violation.

ATTACHMENT Q-3

16) Except as provided above in the Notice of a Right to a Hearing Section, this Notice of Civil Administrative Penalty Assessment shall be effective upon receipt.

Ronald T. Corcory
Acting Assistant Director - Enforcement
Division of Hazardous Waste Management

df

ATTACHMENT 9-4

Form DWM-002 B
2/84

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
~~120 ROUTE 156, YARDVILLE, N.J. 08620~~

Twin Rivers Professional Building
E. Windsor, NJ 08852
(609) 426-0700

NOTICE OF VIOLATION

EPA ID NO. NJD041318043 DATE Aug 6, 1987

NAME OF FACILITY Detrex Chemical Ind. - Gold Shield Division

LOCATION OF FACILITY 935 Industrial Hwy. Unit #1 Cinnaminson

NAME OF OPERATOR Mike Morley - Branch Manager

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION

NJAC 7:26-12.7 a 1 Sumitter shall comply with all conditions of their permit

* Co. accepted a X726 waste code - violation att. 15 & 16 of permit

NJAC 7:26-7.5 g 3 hauler transport hazardous waste to an unauthorized facility

Remedial action to correct these violations must be initiated immediately and be completed by immediately. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of $25,000 per violation.

Jennifer J. Meyer
Investigator, Division of Waste Management
Department of Environmental Protection

Roy A Peebles
8-6-87

COPY

ATTACHMENT Q-5

Form DWM-002 B
2/84

Rep'd by 8-14

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
~~130 ROUTE 130, YARDVILLE, NJ 08620~~

Twin Rivers Process Building
E. Windsor, NJ 08520
(609) 426-0700

NOTICE OF VIOLATION

EPA ID NO. NJD047318043 DATE Aug 6, 1987

NAME OF FACILITY Detrex Chemical Ind. - Gold Shield Division

LOCATION OF FACILITY 835 Industrial Hwy Unit #1 Cinnaminson

NAME OF OPERATOR Mike Morley - Branch Manager

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION

NJAC 7:26-9.4(d)4v every container of hazardous waste arranged so that its identification label is visible

Remedial action to correct these violations must be initiated immediately and be completed by immediately. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of $25,000 per violation.

Roy A Peebles 8-6-87

Jennifer Meyer
Investigator, Division of Waste Management
Department of Environmental Protection

COPY

ATTACHMENT Q-6

Form DWM-002 B
2/84

NE[...] DEPARTMENT OF ENVIRONMENTAL PR[...]TION
DIVISION OF WASTE MANAGEMENT
~~120 ROUTE 156, YARDVILLE, N.J. 08620~~

Twin Rivers Professional
Building
East Windsor, NJ 08[illegible]
(609) 426-0702

NOTICE OF VIOLATION

ID NO. NJD 0475[illegible] DATE Oct 2, 1987

NAME OF FACILITY Detrex Chemical Industries

LOCATION OF FACILITY 835 Industrial Highway, Cinnaminson NJ

NAME OF OPERATOR M.K. Mixley - Branch Manager

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION

NJAC 7:26-12.4 a1 permittee shall comply with all conditions of the permit

Detrex violated Article 14 of permit

Remedial action to correct these violations must be initiated immediately and be completed by Oct 9, 1987. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of $25,000 per violation.

Jennifer H. Meyer
Investigator, Division of Waste Management
Department of Environmental Protection

ATTACHMENT Q-7

Form DWM-005
2/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
BUREAU OF FIELD OPERATIONS

ENFORCEMENT REFERRAL

TO: Vince Krisak DATE: Oct 6, 1987

FROM: Jennifer Meyer through Linda Jordan REGION: Central

RE: Goldshield Div. of Detrex Chem. Industries (Name of Facility) NJD047318048 (ID Number) 855 Industrial Hy (Location Address)

Lot 5.01 Block 507 (Lot and Block) Commamison (Township) Burlington (County)

Same as above (Mailing Address) Zip: 08077 Mike Morely - Branch Manager (Responsible Party)

The attached inspection/investigation report(s) dated Oct 2, 1987 is being referred and it is recommended a NOCAPA be issued for violations of:

NJAC 7:26–	12.4a.1	permittee shall comply with all conditions of the permit
NJSA 58:10–		

Suggested penalty: per schedule

ADDITIONAL COMMENTS:

Company violated Article 14 of permit; company only permitted to store a total of 300 drums for treatment or transfer - 362 drums on site on Oct 2, 1987

REVIEWED AND APPROVED BY:

[signature] 10-15-87

White — Enforcement and Compliance Copy
Yellow — Region Copy

ATTACHMENT Q-8

HE-054-87

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF HAZARDOUS WASTE MANAGEMENT

John J. Trela, Ph.D., Acting Director
401 East State St.
CN 028
Trenton, N.J. 08625
609 - 633 - 1408

IN THE MATTER OF	:	NOTICE OF CIVIL ADMINISTRATIVE
DETREX CHEMICAL INDUSTRIES, INC.	:	PENALTY ASSESSMENT
835 INDUSTRIAL HIGHWAY	:	
CINNAMINSON, NEW JERSEY 08077	:	
ATTENTION: MIKE MORLEY	:	
BRANCH MANAGER	:	

This Notice of Civil Administrative Penalty Assessment is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter "NJDEP" or the "Department") by N.J.S.A. 13:1D-1 et seq. and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and duly delegated to the Assistant Director for Enforcement of the Division of Hazardous Waste Management pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1) The Department has determined that Detrex Chemical Industries, Inc., hereinafter "Detrex", is operating a permitted hazardous waste facility (EPA ID #NJD047318043, permit #0308D) as defined by N.J.A.C. 7:26-1.4 and is located at Block 507, Lot 5.01, 835 Industrial Highway, Cinnaminson Township, Burlington County, State of New Jersey.

2) During an inspection conducted by Departmental personnel on October 2, 1987, it was noted that Detrex failed to comply with paragraph 14 of its hazardous waste permit. Paragraph 14 states that Detrex shall store no more than 300 55-gallon drums of hazardous waste. By storing 362 55-gallon drums of hazardous waste, Detrex violated N.J.A.C. 7:26-12.4(a)1.

3) On October 6, 1987, the Department received copies of two manifests, specifically #NJA0307710 and #NJA0307711, and Detrex's daily hazardous waste inventory log documenting shipment of hazardous waste off site and a total drums count of 230 drums. Thus the Department determined that Detrex attained compliance with N.J.A.C. 7:26-12.4(a)1.

12-7-87
ATTACHMENT Q-9

4) Based on the facts set forth in these FINDINGS, the Department has determined that Detrex has violated the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and the regulations promulgated pursuant thereto, N.J.A.C. 7:26-1 et seq., specifically N.J.A.C. 7:26-12.4(a)1.

NOTICE OF CIVIL ADMINISTRATIVE PENALTY ASSESSMENT

5) Pursuant to N.J.S.A. 13:1E-9e and based upon the above FINDINGS, the Department has determined that a civil administrative penalty should be assessed against Detrex in the amount of $500.

6) Payment of the penalty is due when a final order is issued by the Commissioner subsequent to a hearing, if any, or when this Notice of Civil Administrative Penalty Assessment becomes a final order (see following paragraph). Payment shall be made by certified check payable to "Treasurer, State of New Jersey" and shall be submitted to:

New Jersey Department of Environmental Protection
Bureau of Collections, Licensing & Management Services - FMPGS
CN 402
Trenton, NJ 08625

7) If no request for a hearing is received within twenty (20) calendar days from receipt of this Notice of Civil Administrative Penalty Assessment, it shall become a final order upon the twenty-first calendar day following its receipt and the penalty shall be due and payable.

NOTICE OF RIGHT TO A HEARING

8) Pursuant to N.J.S.A. 52:14B-1 et seq. and N.J.S.A. 13:1-E-9, Detrex is entitled to an administrative hearing. Any hearing request shall be delivered to the address below within twenty (20) calendar days from receipt of this Notice of Civil Administrative Penalty Assessment:

Assistant Director for Enforcement
Division of Hazardous Waste Management
401 East State Street
CN 028
Trenton, NJ 08625
Attention: Ronald T. Corcory, Assistant Director

9) Detrex shall, in its request for a hearing, furnish NJDEP with the following:

a. A statement of the legal authority and jurisdiction under which the hearing or action to be taken is to be held;

b. A reference to the particular sections of the statutes and rules involved;

c. A short and plain statement of the matters of fact and law asserted; and

d. The provisions of this Notice of Civil Administrative Penalty Assessment to which Detrex objects, the reasons for such objections, and any alternative provisions proposed.

GENERAL PROVISIONS

10) This Notice of Civil Administrative Penalty Assessment is binding on Detrex, its principals, directors, officers, agents, successors, assigns, any trustee in bankruptcy or other trustee, and any receiver appointed pursuant to a proceeding in law or equity.

11) Notice is given that violations of any statutes, rules or permits other than those herein cited may be cause for additional enforcement actions, either administrative or judicial. By issuing this Notice of Civil Administrative Penalty Assessment the Department does not waive its rights to initiate additional enforcement actions.

12) No obligations imposed by this Notice of Civil Administrative Penalty Assessment (with the exception of paragraph 5, above) are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of New Jersey, intended to protect the public health, safety, welfare and environment.

13) Notice is given that pursuant to N.J.S.A. 13:1E-9e, the Department is authorized to assess a civil administrative penalty of not more than $25,000.00 for each violation and additional penalties of not more than $2,500.00 for each day during which the violation continues after receipt of an administrative order from the Department.

14) Notice is further given that pursuant to N.J.S.A. 13:1E-9f, any person who violates N.J.S.A. 13:1E-1 et seq. or any code, rule or regulation promulgated thereunder shall be liable to a penalty of not more than $25,000.00 per day of such violation, and each day's continuance of the violation shall constitute a separate violation.

15) Notice is further given that pursuant to N.J.S.A. 13:1E-9f, any person who violates an administrative order issued pursuant to N.J.S.A. 13:1E-9c, or a court order issued pursuant to N.J.S.A. 13:1E-9d, or who fails to pay a civil administrative penalty in full after it is due shall be subject upon order of a court to a civil penalty not to exceed $50,000.00 per day of such violation and each day's continuance of the violation shall constitute a separate violation.

ATTACHMENT Q-11

16) Except as provided above in the Notice of a Right to a Hearing Section, this Notice of Civil Administrative Penalty Assessment shall be effective upon receipt.

Date: 12-7-87

Ronald T. Corcory
Assistant Director - Enforcement
Division of Hazardous Waste Management

df

ATTACHMENT Q-12

HC-057-87

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF HAZARDOUS WASTE MANAGEMENT
John J. Trela, Ph.D., Acting Director
401 East State St.
CN 028
Trenton, N.J. 08625
609 - 633 - 1408

IN THE MATTER OF	:	
DETREX CHEMICAL INDUSTRIES, INC.	:	
835 INDUSTRIAL HIGHWAY	:	NOTICE OF CIVIL ADMINISTRATIVE
CINNAMINSON, NEW JERSEY 08077	:	PENALTY ASSESSMENT
ATTENTION: MIKE MORLEY	:	
BRANCH MANAGER	:	

This Notice of Civil Administrative Penalty Assessment is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter "NJDEP" or the "Department") by N.J.S.A. 13:1D-1 et seq. and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and duly delegated to the Assistant Director for Enforcement of the Division of Hazardous Waste Management pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1) The Department has determined that Gold Shield Division of Detrex Chemical Industries hereinafter "Detrex" is a permitted hazardous waste facility and a hauler of hazardous waste (EPA ID #NJD047318043 permit #0308D) as defined by N.J.A.C. 7:26-1.4 and is located at Block 507, Lot 5.01, 835 Industrial Highway, Cinnaminson Township, Burlington County, State of New Jersey.

2) During an inspection conducted by Departmental personnel on August 6, 1987, the following violations were noted:

   a) Detrex accepted and transported to Detrex's Hazardous Waste Facility certain hazardous waste which the facility was not authorized to handle, specifically four drums of X726 shipped to Detrex on July 30, 1987, as documented by manifest #NJA0307681, in violation of N.J.A.C. 7:26-7.5(g)3.

   b) Detrex failed to have every container arranged so that its identification label is visible, in violation of N.J.A.C. 7:26-9.4(d)4v.

12-18-87

ATTACHMENT B-13

c) Detrex failed to comply with paragraphs 15 and 16(e) et seq. of its Hazardous Waste Facility Permit. Paragraph 15 states that Detrex is authorized to accept spent halogenated solvents with waste codes of F001 and F002 and paragraph 16(e) et seq. outlines procedures to be taken in the event Detrex is offered a hazardous waste of a type which Detrex is not authorized to handle. By accepting four (4) drums of X726 on July 30, 1987, as documented by manifest #NJA0307681, Detrex violated N.J.A.C. 7:26-12.4(a)1.

3) By a letter dated August 14, 1987, and a followup inspection on September 8, 1987, it was determined that Detrex had attained compliance with N.J.A.C. 7:26-9.4(d)4v.

4) Upon an inspection conducted on November 2, 1987, it was determined that Detrex had shipped the four (4) drums of X726 back to the original generator. Thus Detrex had attained compliance with N.J.A.C. 7:26-12.4(a)1.

5) Based on the facts set forth in these FINDINGS, the Department has determined that Detrex has violated the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and the regulations promulgated pursuant thereto, N.J.A.C. 7:26-1 et seq., specifically N.J.A.C. 7:26-7.5(g)3, 9.4(d)4v, and 12.4(a)1.

NOTICE OF CIVIL ADMINISTRATIVE PENALTY ASSESSMENT

6) Pursuant to N.J.S.A. 13:1E-9e and based upon the above FINDINGS, the Department has determined that a civil administrative penalty should be assessed against Detrex in the amount of $2,500.

7) Payment of the penalty is due when a final order is issued by the Commissioner subsequent to a hearing, if any, or when this Notice of Civil Administrative Penalty Assessment becomes a final order (see following paragraph). Payment shall be made by certified check payable to "Treasurer, State of New Jersey" and shall be submitted to:

New Jersey Department of Environmental Protection
Bureau of Collections, Licensing & Management Services - FMPGS
CN 402
Trenton, NJ 08625

8) If no request for a hearing is received within twenty (20) calendar days from receipt of this Notice of Civil Administrative Penalty Assessment, it shall become a final order upon the twenty-first calendar day following its receipt and the penalty shall be due and payable.

NOTICE OF RIGHT TO A HEARING

9) Pursuant to N.J.S.A. 52:14B-1 et seq. and N.J.S.A. 13:1-E-9, Detrex is entitled to an administrative hearing. Any hearing request shall be delivered to the address below within twenty (20)

calendar days from receipt of this Notice of Civil Administrative Penalty Assessment:

Assistant Director for Enforcement
Division of Hazardous Waste Management
401 East State Street
CN 028
Trenton, NJ 08625
Attention: Ronald T. Corcory, Assistant Director

10) Detrex shall, in its request for a hearing, furnish NJDEP with the following:

a. A statement of the legal authority and jurisdiction under which the hearing or action to be taken is to be held;

b. A reference to the particular sections of the statutes and rules involved;

c. A short and plain statement of the matters of fact and law asserted; and

d. The provisions of this Notice of Civil Administrative Penalty Assessment to which Detrex objects, the reasons for such objections, and any alternative provisions proposed.

GENERAL PROVISIONS

11) This Notice of Civil Administrative Penalty Assessment is binding on Detrex, its principals, directors, officers, agents, successors, assigns, any trustee in bankruptcy or other trustee, and any receiver appointed pursuant to a proceeding in law or equity.

12) Notice is given that violations of any statutes, rules or permits other than those herein cited may be cause for additional enforcement actions, either administrative or judicial. By issuing this Notice of Civil Administrative Penalty Assessment the Department does not waive its rights to initiate additional enforcement actions.

13) No obligations imposed by this Notice of Civil Administrative Penalty Assessment (with the exception of paragraph 6, above) are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of New Jersey, intended to protect the public health, safety, welfare and environment.

14) Notice is given that pursuant to N.J.S.A. 13:1E-9e, the Department is authorized to assess a civil administrative penalty of not more than $25,000.00 for each violation and additional penalties of not more than $2,500.00 for each day during which the violation

ATTACHMENT Q-15

continues after receipt of an administrative order from the Department.

15) Notice is further given that pursuant to N.J.S.A. 13:1E-9f, any person who violates N.J.S.A. 13:1E-1 et seq. or any code, rule or regulation promulgated thereunder shall be liable to a penalty of not more than $25,000.00 per day of such violation, and each day's continuance of the violation shall constitute a separate violation.

16) Notice is further given that pursuant to N.J.S.A. 13:1E-9f, any person who violates an administrative order issued pursuant to N.J.S.A. 13:1E-9c, or a court order issued pursuant to N.J.S.A. 13:1E-9d, or who fails to pay a civil administrative penalty in full after it is due shall be subject upon order of a court to a civil penalty not to exceed $50,000.00 per day of such violation and each day's continuance of the violation shall constitute a separate violation.

17) Except as provided above in the Notice of a Right to a Hearing Section, this Notice of Civil Administrative Penalty Assessment shall be effective upon receipt.

Date: 12-18-87

Ronald T. Corcory
Assistant Director - Enforcement
Division of Hazardous Waste Management

df

ATTACHMENT Q-16

Form DWM-002 B
2/84

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
~~120 ROUTE 130, YARDVILLE, N.J. 08620~~
TWIN RIVERS PROFESSIONAL BLDG
EAST WINDSOR, NJ. 08520

NOTICE OF VIOLATION

ID NO. NJD047318043 DATE MAY 2, 1988

NAME OF FACILITY GOLDSHIELD DIV. OF DETREX CHEMICAL IND.

LOCATION OF FACILITY 835 INDUSTRIAL HIGHWAY, CINNAMINSON, BURLINGTON

NAME OF OPERATOR MIKE MORELY MM

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION

NJAC 7:26-12.4 (a) 1 PERMITTEE SHALL COMPLY WITH ALL CONDITIONS OF THEIR PERMIT, (RECEIVING SPENT SOLVENT FROM NON-CUSTOMERS)

Remedial action to correct these violations must be initiated immediately and be completed by MAY 31, 1988. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of $25,000 per violation.

Douglas A Greenfield
Investigator, Division of Waste Management
Department of Environmental Protection

ATTACHMENT Q-17

Form DWM-005
2/83

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
BUREAU OF FIELD OPERATIONS

ENFORCEMENT REFERRAL

TO: ~~Ray Rose~~ Vince Krisak VK DATE: MAY 3, 1988

FROM: Doug Greenfield thru Linda Jordan LJ REGION: CENTRAL

RE: Goldshield Div. of Detrex Chem. Inc. NJD047318043 835 Industrial Way
Name of Facility ID Number Location Address

5.01 507 Cinnaminson Burlington
Lot and Block Township County

835 Industrial Way, Cinnaminson 08077 Mike Morley
Mailing Address Responsible Party

The attached inspection/investigation report(s) dated 4-28-88 is being referred and it is recommended a NDCAPA. be issued for violations of:

NJAC 7:26– 12.4(a)1 Permittee shall comply with all conditions of their permit

NJSA 58:10–

Suggested penalty:

ADDITIONAL COMMENTS:

Received material from sister plant in N.C. Material sent to NC and was there for period of time and then shipped back. Question on whether material was ever sent from Cinnaminson (Setion 14 - Authorized Activity Section)

REVIEWED AND APPROVED BY:
[signature] for V. Krisak 5/11/88

White – Enforcement and Compliance Copy
Yellow – Region Copy

ATTACHMENT Q-18

Let's protect our earth

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT

HC 00589

Michele M. Putnam
Deputy Director
Hazardous Waste Operations

John J. Trela, Ph.D., Director
401 East State St.
CN 028
Trenton, N.J. 08625
(609)633-1408

Lance R. Miller
Deputy Director
Responsible Party Remedial Action

13 OCT 1988

IN THE MATTER OF	:	NOTICE OF CIVIL ADMINISTRATIVE
GOLDSHIELD DIVISION OF DETREX	:	PENALTY ASSESSMENT
CHEMICAL INDUSTRIES	:	
835 INDUSTRIAL HIGHWAY	:	
CINNAMINSON, NEW JERSEY 08077	:	

This Notice of Civil Administrative Penalty Assessment is issued pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection (hereinafter "NJDEP" or the "Department") by N.J.S.A. 13:1D-1 et seq. and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and duly delegated to the Assistant Director for Enforcement of the Division of Hazardous Waste Management pursuant to N.J.S.A. 13:1B-4.

FINDINGS

1. The Department has determined that Goldshield Division of Detrex Chemical Industries, hereinafter "Detrex", is operating a hazardous waste facility (EPA ID #NJD047318043) as defined by N.J.A.C. 7:26-1.4 and is located at Block 507, Lot 5.01, 835 Industrial Highway, Cinnaminson Township, Burlington County, State of New Jersey.

2. During an inspection conducted by Departmental personnel on April 22, 1988, it was noted that Detrex failed to comply with paragraph 14 of its Hazardous Waste Permit. Paragraph 14 states that Detrex shall only accept spent solvents from customers to whom Detrex has sold the degreasing solvents. By accepting 26 drums of F001 spent solvents from a Detrex plant in North Carolina, as documented by manifest NJA0392977, Detrex violated N.J.A.C. 7:26-12.4(a)1.

3. Upon a followup inspection conducted on May 24, 1988, it was determined that Detrex had shipped off-site the 26 drums of F001 (spent solvents) to an authorized facility in Michigan.

ATTACHMENT Q-19-

4. Based on the facts set forth in these FINDINGS, the Department has determined that Detrex has violated the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and the regulations promulgated pursuant thereto, N.J.A.C. 7:26-1 et seq., specifically N.J.A.C. 7:26-12.4(a)1.

NOTICE OF CIVIL ADMINISTRATIVE PENALTY ASSESSMENT

5. Pursuant to N.J.S.A. 13:1E-9e and based upon the above FINDINGS, the Department has determined that a civil administrative penalty should be assessed against Detrex in the amount of $4,500.00.

6. Payment of the penalty is due when a final order is issued by the Commissioner subsequent to a hearing, if any, or when this Notice of Civil Administrative Penalty Assessment becomes a final order (see following paragraph). Payment shall be made by certified check payable to "Treasurer, State of New Jersey" and shall be submitted to:

New Jersey Department of Environmental Protection
Bureau of Revenue
CN 402
Trenton, NJ 08625

7. If no request for a hearing is received within twenty (20) calendar days from receipt of this Notice of Civil Administrative Penalty Assessment, it shall become a final order upon the twenty-first calendar day following its receipt and the penalty shall be due and payable.

NOTICE OF RIGHT TO A HEARING

8. Pursuant to N.J.S.A. 52:14B-1 et seq. and N.J.S.A. 13:1-E-9, Detrex is entitled to an administrative hearing. Any hearing request shall be delivered to the address below within twenty (20) calendar days from receipt of this Notice of Civil Administrative Penalty Assessment:

Assistant Director for Enforcement
Division of Hazardous Waste Management
401 East State Street
CN 028
Trenton, NJ 08625
Attention: Karl J. Delaney, Assistant Director

9. Detrex shall, in its request for a hearing, furnish NJDEP with the following:

   a. A statement of the legal authority and jurisdiction under which the hearing or action to be taken is to be held;

   b. A reference to the particular sections of the statutes and rules involved;

ATTACHMENT Q-20

c. A short and plain statement of the matters of fact and law asserted; and

d. The provisions of this Notice of Civil Administrative Penalty Assessment to which Detrex objects, the reasons for such objections, and any alternative provisions proposed.

GENERAL PROVISIONS

10. This Notice of Civil Administrative Penalty Assessment is binding on Detrex, its principals, directors, officers, agents, successors, assigns, any trustee in bankruptcy or other trustee, and any receiver appointed pursuant to a proceeding in law or equity.

11. Notice is given that violations of any statutes, rules or permits other than those herein cited may be cause for additional enforcement actions, either administrative or judicial. By issuing this Notice of Civil Administrative Penalty Assessment the Department does not waive its rights to initiate additional enforcement actions.

12. No obligations imposed by this Notice of Civil Administrative Penalty Assessment (with the exception of paragraph 5, above) are intended to constitute a debt, damage claim, penalty or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the State of New Jersey, intended to protect the public health, safety, welfare and environment.

13. Notice is given that pursuant to N.J.S.A. 13:1E-9e, the Department is authorized to assess a civil administrative penalty of not more than $25,000.00 for each violation and additional penalties of not more than $2,500.00 for each day during which the violation continues after receipt of an administrative order from the Department.

14. Notice is further given that pursuant to N.J.S.A. 13:1E-9f, any person who violates N.J.S.A. 13:1E-1 et seq. or any code, rule or regulation promulgated thereunder shall be liable to a penalty of not more than $50,000.00 per day of such violation, and each day's continuance of the violation shall constitute a separate violation.

15. Notice is further given that pursuant to N.J.S.A. 13:1E-9f, any person who violates an administrative order issued pursuant to N.J.S.A. 13:1E-9c, or a court order issued pursuant to N.J.S.A. 13:1E-9d, or who fails to pay a civil administrative penalty in full after it is due shall be subject upon order of a court to a civil penalty not to exceed $100,000.00 per day of such violation and each day's continuance of the violation shall constitute a separate violation.

ATTACHMENT Q-21

16. Except as provided above in the Notice of a Right to a Hearing Section, this Notice of Civil Administrative Penalty Assessment shall be effective upon receipt.

Date: _____

Karl J. Delaney
Assistant Director - Enforcement
Division of Hazardous Waste Management

df

ATTACHMENT B-22

HWM-004A
3/89

Jersey Department of Environmental Protection
Division of Hazardous Waste Management
Twin Rivers Professional Building
East Windsor, N.J. 08520

NOTICE OF VIOLATION

ID NO. NJD 047 318 043 DATE 01-23-90

NAME OF FACILITY DETREX Chemical Industries Inc

LOCATION OF FACILITY 835 Industrial Way, Cinnaminson NJ 08077

NAME OF OPERATOR ANNA FARROW, Facility Manager AF

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION

NJAC 7:26-7.6(a)2 Facility operator shall only accept Hazardous waste shipments which are accompanied by A properly completed MANIFEST.

Remedial action to correct these violations must be initiated immediately and be completed by Immediately. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of $25,000 per violation.

Paul R Poly 609-426-0700

Division of Hazardous Waste Management
Department of Environmental Protection

ATTACHMENT 9-23

HWM-004A
3/89

New Jersey Department of Environmental Protection
Division of Hazardous Waste Management
Twin Rivers Professional Building
East Windsor, N.J. 08520

NOTICE OF VIOLATION

ID NO. NJD 047 318 043 DATE 01-23-90

NAME OF FACILITY DETREX Chemical Industries Inc.

LOCATION OF FACILITY 835 Industrial Way, Cinnaminson NJ 08077

NAME OF OPERATOR Anna Farrow, Facility Manager

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION

NJAC 7:26-7.5(d)2 Hauler may not accept hazardous waste from a generator unless it is accompanied by a properly completed manifest.

Remedial action to correct these violations must be initiated immediately and be completed by Immediately. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of $25,000 per violation.

Paul R. Pos 609-426-0700

Division of Hazardous Waste Management
Department of Environmental Protection

ATTACHMENT Q-24

DETREX CORPORATION

P.O. Box 5111, Southfield, MI 48086-5111

TWX 810-224-4756

TELEPHONE:
(313)358-5800

October 5, 1989

State of New Jersey
Department of Environmental Protection
Division of Waste Management
Central Field Office - Region II
Twin Rivers Professional Building
East Windsor, New Jersey 08520

Attention: Mr. Peter C. Taylor
Senior Environmental Specialist

Dear Mr. Taylor:

As requested by the State of New Jersey, Detrex Corporation will decontaminate the following idle solvent recycling equipment at its Cinnaminson facility:

A. 1-Model 5350 Detrex chlorinated solvent still

B. 1-500 gallon spent solvent feed tank

C. 1-4000 gallon still bottom storage tank

Closure Procedure and Schedule

A. Any remaining still and tank sludges and liquids will be drained into 55 gallon drums. Any solids will be hand shovelled into 55 gallon drums. All drummed waste so generated will be transported to a permitted treatment or disposal facility.

B. Following removal of any remaining sludges, liquids and solids from the equipment designated for closure, Detrex will decontaminate the interior of each vessel. The decontamination procedure will follow that described in item 4 of the Closure Plan Sequence and will be:

Solvent rinse the interior of each vessel with 1,1,1 trichloroethane until clean and then allow the vessel to air dry for 15 minutes.

C. All solvent rinses generated will be placed in 55 gallon drums for transportation to a permitted treatment or disposal facility.

D. The floor will be swept and cleaned and all sweepings and cleaning wastes will be placed in 55 gallon drums for transportation to a permitted treatment or disposal facility.

ATTACHMENT R-1

E. Detrex will begin cleaning and decontamination proceedings within 7 to 10 days after approval of the Closure Plan by the State of New Jersey and will complete the equipment closure within one month after work has started.

Detrex will ship the still and feed tank to its Charlotte, North Carolina facility. The still bottom storage tank will remain at the Cinnaminson facility and be used for storage of reclaim solvent.

If additional information is required, please contact either:

Anna Farrow
Gold Shield Solvents
835 Industrial Highway, Unit #1
Cinnaminson, New Jersey 08077
(609) 786-8686

or

Charles Guy
Detrex Corporation
P. O. Box 1398
Ashtabula, Ohio 44004
(216) 997-6131

Sincerely,

DETREX CORPORATION

Charles U. Guy
Manager Environmental Compliance
Corporate Risk Management Dept.

bz

cc: A. Farrow
J. Harrison
I. Shamiyeh

ATTACHMENT R-2

Phone: (609) 292-7172

COMMUNICATIONS CENTER NOTIFICATION REPORT

Date logged 1/12/90

CASE NO. 90 - 01 - 12 - 0925
(Yr) (Mo) (Day) (Time)

DATE 01 . 12 . 90 (Mo) (Day) (Yr)   REC'D BY Simicsak / JS (Initials)   REVIEWED BY James [illegible]

NATURE OF INCIDENT: ___ Citizen Notification ___ Munic. Notification X Facil. Notification ___ Other Notification

INCIDENT REPORT BY:

Name Michael Morley   Phone 609-786-8686

Street 835 Industrial Hwy.

Municipality Cinnaminson   State NJ

Affiliation/Title Ditrex Corp. / Branch manager

INCIDENT LOCATION: ___ Transportation X Facility ___ Other

Name (Site) DeTrex Corp.   Phone 609-786-8686

Street 835 Industrial Hwy.

Municipality Cinnaminson   County Burlington   State NJ   Zip Code ___

Location Type: ___ Residential X Industrial ___ Rural ___ Sensitive Population (Hospital, School, Nursing Home)

Date of Incident: 01 . 11 . 90 (Mo) (Day) (Yr)   Time: 1715

IDENTITY OF SUBSTANCE(S) SPILLED, RELEASE, ETC.: X Known ___ Suspected ___ Unknown ___ None

Name of Substance(s): (Gas, (Liquid), Solid) 111 - Tri-chloroethane-1,1,1

TCPA Chemical (Y/(N)/U)   CAS Number ___

Amount Released/Spilled 6 gallons   ___ Actual ___ Potential X Estimated

Substance Contained ((Y)/N/U)

Type of Release/Spill: X Terminated ___ Continuous ___ Intermittent

Hazardous Material ((Y)/N/U)   A310 Letter ((Y)/N)   0308 COMU CODE   02 REP CODE

INCIDENT DESCRIPTION:

___ Fire ___ Explosion ___ Air Rel X Spill ___ Abandoned Containers ___ Illegal Dumping

___ MVA ___ Odors ___ Smoke/Dust ___ Sewage ___ NJPDES ___ L.U.S.T. ___ Wildlife

___ Equip. Startup/Shutdown, Equip. Fail/Upset, etc. ___

___ Other (Derailment, Ocean Dumping, Noise, etc.) ___

Injuries (Y/(N)/U)   Public Exposure (Y/(N)/U)

Facility Evacuation (Y/(N)/U)   Police at Scene (Y/(N)/U)

Public Evacuation (Y/(N)/U)   Firemen at Scene (Y/(N)/U)

Contamination of ___ Air X Land ___ Water   Assistance Requested (Y/(N)/U)

Receiving Water ___   Wind Direction/Speed ___ / ___

STATUS AT INCIDENT SCENE In Transfer operation equipment fell causing spill Ditrex personnel did clean-up.

RESPONSIBLE PARTY: X Known ___ Suspected ___ Unknown

Company Name Ditrex Corp.   Phone 609-786-8686

Contact Michael Morley   Title Branch manager

Street 835 Industrial Hwy

Municipality Cinnaminson   County Burlington   State NJ   Zip Code ___

OFFICIALS NOTIFIED (Name/Title):

NJSP	/ OEM	Phone	Date/Time 1/12	/ (T)/M
Local Health	/	Phone	Date/Time	/ (T/M)
Local Munic. Operator 213	Cinnaminson	Phone 829-6666	Date/Time 1/12	/ 0948 (T/M)
Other	/	Phone	Date/Time	

ATTACHMENT S

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
John J. Trela, Ph.D., Director
Twin Rivers Professional Bldg.
East Windsor, N.J. 08520
(609) 426-0700

M E M O R A N D U M

TO: Detective William Chatenka
State Police

FROM: Vincent S. Krisak, Bureau Chief
Central Bureau of Field Operations

DATE: January 31, 1990

SUBJECT: Detrex, Cinnaminson - Enforcement Profile
1983 to Present

March 2, 1983

EPA NOV 40 CFR 265.16 - Job descriptions and certifications of instruction and training.

40 CFR 265.32(a) and 265.34 - Internal communications system between hazardous waste drum storage area and offices.

June 8, 1983

7:26-7.5(g)2 - In acting as transporter: Accepted from two generators with incomplete manifest (No EPA ID Numbers).

7:26-7.6(a)2 - In acting as TSD: Accepted from two generators with incomplete manifest (No EPA ID Numbers).

August 25, 1983

NOV 7:26-7.4(g)1 - Failed to submit 1982 record of activities by March 1, 1983.

February 21, 1984

Action $350 collected.

June 26, 1986

NOV 7:26-3.4(h) - Failure to mark capacity of their DEP registered truck.

ATTACHMENT I-1.

July 31, 1986

NOV 7:26-9.4(g)8 - Failure to conduct semi-annual drill involving employees and local authorities (waiver granted).

NOV 7:26-9.6(f)5 - Failure to have facility inspected twice a year by local fire department (waiver granted).

November 12, 1986

7:26-12.4(a)1 - Violated part of their permit. Used gas chromatography to analyze rather than specific gravity or boiling point method - $500 penalty.

August 6, 1987

7:26-7.5(g)3 - Accepted and transported four drums waste not authorized to handle - $1000.

7:26-9.4(d)4v - Failed to have containers arranged so all labels visible - $500.

7:26-12.4(a)1 - Failed to comply with permit by accepting four drums of waste not authorized to - $1000. Penalty total $2500 - 12/18/87.

October 2, 1987

7:26-12.4(a)1 - Stored more than 300 drums contrary to their permit. $500 penalty 12/7/87.

May 31, 1988

NOV 7:26-12.4(a)1 - Violated permit by accepting solvent from non-customers (violated four times: 11/12/84, 8/6/87, 10/2/87 and 4/28/88). $3600 penalty 11/13/88.

V.S.K.

df

ATTACHMENT I-2

FORM 84

27.43.42.3 D

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 27-2375
Application No. _____
County _____

WELL RECORD

1. OWNER Amico Sand and Gravel Co. ADDRESS Riverside, N.J.
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION River Road, Cambridge, Riverside, N.J.
3. DATE COMPLETED 4/15/57 DRILLER Charles Mollitor,
4. DIAMETER: top 6 Inches Botton _____ Inches TOTAL DEPTH 49 Feet
5. CASING: Type Blk Steel Diameter 6 Inches Length Random Feet
6. SCREEN: Type Johnson Size of opening 40 slott Diameter 6 Inches Length 10 Feet
   Range { Top _____ Feet / Bottom _____ Feet } Geologic Formation _____
   Tail piece. Diameter 6 Inches Length 12± Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date 4/15/57 Yield 120 Gallons per minute
   Static water level before pumping 7 Feet below surface
   Pumping level 18 feet below surface after 5 hours pumping
   Drawdown 11 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How Pumped Air How measured 5 gal bkt Stop Watch
   Observed effect on nearby wells None
9. PERMANENT PUMPING EQUIPMENT:
   Type Centrifugal Mfrs. Name Jacuzzi
   Capacity 75 G.P.M. How Driven Elec H.P. 3 R.P.M. 3450
   Depth of Pump in well _____ Feet _____ Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet _____ Depth of Meter on Pump _____
10. USED FOR Industrial AMOUNT Average 5000 Gallons Daily
    Maximum 8000 Gallons Daily
11. QUALITY OF WATER Good Sample: Yes ____ No. ____
    Taste _____ Odor _____ Color _____ Temp. _____ °F
12. LOG _____ Are samples available _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA Log Book of Paul Steffens
14. DATA OBTAINED BY Aronson Bell Date 5/13/57

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

ATTACHMENT U-1

27-13.1.24

Form 87-5M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply

Permit No. 27-1255
Application No. _____
County _____

WELL RECORD

1. OWNER Delsea Conc ADDRESS Norman Ave.
Owner's Well No. 1 SURFACE ELEVATION 40 Feet (Above mean sea level)
2. LOCATION Norman Ave Riverside N.J.
3. DATE COMPLETED Aug 30 DRILLER Leon Gages
4. DIAMETER: Top 8 Inches Bottom _____ Inches TOTAL DEPTH 35 Feet
5. CASING: Type steel Diameter 8 Inches Length 30 Feet
6. SCREEN: Type ww Size of Opening 80 Diameter 8 Inches Length 5 Feet
Range in Depth { Top _____ Feet Bottom _____ Feet Geologic Formation _____
Tail piece. Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date Aug 30 Yield 20 Gallons per minute
Static water level before pumping 10 Feet below surface
Pumping level 25 feet below surface after 4 hours pumping
Drawdown 15 Feet Specific Capacity 2 Gals. per min. per ft. of drawdown
How Pumped electric How measured barrel
Observed effect on nearby wells none
9. PERMANENT PUMPING EQUIPMENT:
Type 5HP system Capacity 60 Gallons per minute
How Driven electric Horse Power 5 R.P.M. 3600
Depth of pump in well 27 Feet Depth of Foot piece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____
10. USED FOR Concrete Plant AMOUNT { Average _____ Gallons Daily Maximum _____ Gallons Daily
11. QUALITY OF WATER good Sample: Yes _____ No. _____
Taste none Odor none Color clear Temperature 60 °F
12. LOG _____ Are samples available? _____
(Give details on back of sheet or on separate sheet)
SOURCE OF DATA _____
DATA OBTAINED BY Leon Gages DATE Aug 30 1954

(Note: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

ATTACHMENT U-2

27-3.427

17-6M-1-48

SEALED 2/3/86

DEPARTMENT OF CONSERVATION
Division of Water Policy and Supply

Permit No. 27-238
Application No. P-33
County BURLINGTON

WELL RECORD

OWNER Hoeganaes Sponge Iron Co. ADDRESS St. Mihiel Dr., Cinnaminson Township

Owner's Well No. Layne Well No. 1 SURFACE ELEVATION ..... Feet (Above mean sea level)

LOCATION Cinnaminson Township, Burlington, New Jersey

DATE COMPLETED Pump to be Installed DRILLER Layne-New York Company, Inc.

DIAMETER: Top 8 Inches Bottom 8 Inches TOTAL DEPTH 136 Feet

CASING: Type Steel Diameter 8 Inches Length 119 Feet

SCREEN: Type Layne Size of Opening Shutter Diameter 8 Inches Length 15 Feet

Range in Depth { Top 119 Feet / Bottom 134 Feet } Geologic Formation Sand & Gravel Raritan

Tail piece: Diameter ..... Inches Length ..... Feet

WELL FLOWS NATURALLY ..... Gallons per Minute at ..... Feet above surface

Water rises to ..... Feet above surface

RECORD OF TEST: Date 6/3/51 Yield 326 Gallons per minute

Static water level before pumping 16'-6" Feet below surface

Pumping level 85 feet below surface after 8 hours pumping

Drawdown 68.5 Feet Specific Capacity 4 plus Gals. per min. per ft. of drawdown

How Pumped Gasoline Engine How measured Orifice

Observed effect on nearby wells .....

PERMANENT PUMPING EQUIPMENT: TO BE INSTALLED - PROPOSED

Type Turbine Capacity 90 Gallons per minute

How Driven Elec. Horse Power 5 R.P.M. 1800

Depth of pump in well 50 Feet Depth of foot piece in well 65 Feet

USED FOR Industrial AMOUNT { Average ..... Gallons Daily / Maximum ..... Gallons Daily }

QUALITY OF WATER ..... Sample: Yes ..... No. .....

Taste ..... Odor ..... Color ..... Temperature ..... °F

See Reverse Side Are samples available?
(Give details on back of sheet or on separate sheet)

SOURCE OF DATA Layne-New York Company, Inc.

DATA OBTAINED BY Layne-New York Company, Inc. DATE March 12th, 1952

(Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, record of special casing arrangements, etc.)

ATTACHMENT U-3

EACH STRATUM	DEPTH OF STRATA	FORMATION FOUND
10'	10'	Top Sand
6'	16'	Sand & Sandy Clay
5'	21'	Muddy Packed Sand
5'	26'	Sand, Gravel & Clay
8'	34'	Sand
11'	45'	Clay
14'	59'	Sand, Gravel & Clay
13'	72'	Yellow Sand, Gravel & Clay Balls
10'	82'	Gray Sand & White Clay Balls
16'	98'	Gravel Sand & Clay Packed
4'	102'	Gravel & Sand, Muddy
7'	109'	Gravel & Streaks of Clay
26'	135'	Coarse Sand & Gravel

Kmr

ATTACHMENT U-4

27434

FORM 87-10M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 27-32
Application No. _____
County _____

WELL RECORD

1. OWNER Richard James, ADDRESS Riverton, N.J.
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Cinnaminson Twp. Riverton, N.J.
3. DATE COMPLETED 1/15/60 DRILLER Charles Mollitor,
4. DIAMETER: top 4 Inches Botton _____ Inches TOTAL DEPTH 30 Feet
5. CASING: Type Blk Steel Diameter 4 Inches Length Random Feet
6. SCREEN: Type Johnson Size of opening 30 slot Diameter 4 Inches Length 5½ Feet
   Range { Top _____ Feet / Bottom _____ Feet Geologic Formation _____
   Tail piece. Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date 1/15 Yield 20 Gallons per minute
   Static water level before pumping 13 Feet below surface
   Pumping level 22 feet below surface after 2 hours pumping
   Drawdown 10 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
   How Pumped Air How measured 5 gal bkt stop Watch
   Observed effect on nearby wells None
9. PERMANENT PUMPING EQUIPMENT:
   Type Others Mfrs. Name _____
   Capacity _____ G.P.M. How Driven _____ H.P. _____ R.P.M. _____
   Depth of Pump in well _____ Feet _____ Depth of Footpiece in well _____ Feet
   Depth of Air Line in well _____ Feet _____ Depth of Meter on Pump _____
10. USED FOR Domestic AMOUNT Average 200 Gallons Daily
    Maximum _____ Gallons Daily
11. QUALITY OF WATER _____ Sample: Yes ____ No. ____
    Taste _____ Odor _____ Color _____ Temp. _____ °F
12. LOG _____ Are samples available _____
    (Give details on back of sheet or on seperate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA Log Book of Paul Gerlens
14. DATA OBTAINED BY Aronson Bell Date 1/20/60

(NOTE: Use other side of this sheet for additional information such as log of materials penetrat analysis of the water, sketch map, sketch of special casing arrangements, etc.)

ATTACHMENT U-5

27.43.4 51

Form 87-10M

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 27-2745
Application No. _____
County _____

WELL RECORD

1. OWNER John McCuslin ADDRESS St. Mihiel Drive - Riverside N.J.
   Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Riverside Burl. Co
3. DATE COMPLETED Mar. 30, 1953 DRILLER W. R. Clair
4. DIAMETER: top 3 Inches Botton 3 Inches TOTAL DEPTH 45 Feet
5. CASING: Type Blk. Steel Diameter 3 Inches Length 40 Feet
6. SCREEN: Type Brass - Slotted Size of Opening #20 Diameter 2 3/4 Inches Length 5 Feet
   Range { Top 40 Feet / Bottom 45 Feet } Geologic Formation Sand
   Tail piece. Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
   Water rises to _____ Feet above surface
8. RECORD OF TEST: Date Mar. 31, 1953 Yield 20 Gallons per minute
   Static water level before pumping 12 Feet below surface
   Pumping level 16 feet below surface after 2 hours pumping
   Drawdown 4 Feet Specific Capacity 5 Gals. per min. per ft. of drawdown
   How Pumped Compressed Air How measured Barrel
   Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
   Type Piston Pump Mfrs. Name Sears Roebuck & Co
   Capacity 4 G.P.M. How Driven Electric H.P. 1/4 R.P.M. 1725
   Depth of Pump in well _____ Feet _____ Depth of Footpiece in well 33 Feet
   Depth of Air Line in well _____ Feet _____ Depth of Meter on Pump _____
10. USED FOR domestic AMOUNT Average _____ Gallons Daily
    Maximum _____ Gallons Daily
11. QUALITY OF WATER good Sample: Yes ____ No. ____
    Taste none Odor none Color clear Temp. _____ °F
12. LOG _____ Are samples available _____
    (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA Drillers Log
14. DATA OBTAINED BY W. R. Clair Date _____

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements etc.)

ATTACHMENT H-6

Form 87-54

27.93.514 [7]

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
Division of Water Policy & Supply

Permit No. 27-977
Application No. _____
County _____

WELL RECORD

1. OWNER William Maute, ADDRESS Riverside, N.J.
Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Fourth & Chester Ave., Riverside, N.J.
3. DATE COMPLETED 9/4/53 DRILLER Charles Mollitor
4. DIAMETER: Top 4 Inches Bottom _____ Inches TOTAL DEPTH 48 Feet
5. CASING: Type Black Steel Diameter 4 Inches Length Random Feet
6. SCREEN: Type Cook Size of Opening 20 Slott Diameter 4 Inches Length 6' Feet
Range in Depth { Top _____ Feet Bottom _____ Feet Geologic Formation _____
Tail piece. Diameter _____ Inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date 9/4/53 Yield 10 Gallons per minute
Static water level before pumping 18' Feet below surface
Pumping level 25' feet below surface after 2 hours pumping
Drawdown 7 Feet Specific Capacity _____ Gals. per min. per ft. of drawdown
How Pumped Air How measured 5 gal. bkt. Stop watch
Observed effect on nearby wells None
9. PERMANENT PUMPING EQUIPMENT:
Type Others Capacity _____ Gallons per minute
How Driven _____ Horse Power _____ R.P.M. _____
Depth of pump in well _____ Feet Depth of Foot piece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____
10. USED FOR Domestic AMOUNT { Average 300 - 300 Gallons Daily Maximum 400 Gallons Daily
11. QUALITY OF WATER Good Sample: Yes _____ No. _____
Taste _____ Odor _____ Color _____ Temperature _____ °F
12. LOG _____ (Give details on back of sheet or on separate sheet) Are samples available? _____
13. SOURCE OF DATA Log Book of Gene Weik
14. DATA OBTAINED BY Aronson Bell DATE 9/18/53

(Note: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

ATTACHMENT W-7

27-43-434

FORM 87

DEPARTMENT OF CONSERVATION
AND ECONOMIC DEVELOPMENT
DIVISION OF WATER POLICY & SUPPLY

Permit No. 27-4554
Application No. _____
County _____

WELL RECORD

1. OWNER Clement Yoka ADDRESS 210 Chestnut St Cambridge N.J
Owner's Well No. _____ SURFACE ELEVATION _____ Feet (Above mean sea level)
2. LOCATION Cambridge - Delran Township N.J
3. DATE COMPLETED 9/45 DRILLER Howard Farmer
4. DIAMETER: top 4 inches Bottom 4 inches TOTAL DEPTH 53 Feet
5. CASING: Type Steel Diameter 4 inches Length 48 Feet
6. SCREEN: Type Slot Size of Opening 20 Diameter 3½ inches Length 5 Feet
Range in Depth { Top 48 Feet / Bottom 53 Feet Geologic Formation P Local
Tail piece: Diameter _____ inches Length _____ Feet
7. WELL FLOWS NATURALLY _____ Gallons per Minute at _____ Feet above surface
Water rises to _____ Feet above surface
8. RECORD OF TEST: Date 9/45 Yield 50 Gallons per minute
Static water level before pumping 16 Feet below surface
Pumping level 20 feet below surface after 8 hours pumping
Drawdown 4 Feet Specific Capacity 12 Gals. per min. per ft. of drawdown
How Pumped Gun How measured B.B.L.
Observed effect on nearby wells _____
9. PERMANENT PUMPING EQUIPMENT:
Type Jet Mfrs. Name Jacuzzi
Capacity 10 G.P.M. How Driven Elec H.P. ½ R.P.M. 3450
Depth of Pump in well _____ Feet Depth of Footpiece in well _____ Feet
Depth of Air Line in well _____ Feet Type of Meter on Pump _____ Size _____ Inches
10. USED FOR Dom AMOUNT { Average 500 Gallons Daily / Maximum 1000 Gallons Daily
11. QUALITY OF WATER Good Sample: Yes _____ No. _____
Taste No Odor No Color Nil Temp. _____ °F
12. LOG _____ Are samples available? _____
(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13. SOURCE OF DATA Driller
14. DATA OBTAINED BY Jame Date 9/45

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

ATTACHMENT U-8

Memorandum

To: File - Division of Hazardous Waste Management/BPA
From: Janet Smolenski
Date: March 15, 1990
Re: Site Inspection of Detrex Chemical

A site inspection was conducted at Detrex Chemical Industries, Inc. in Cinnaminson Township on 3-14-90 by Beth Torpey HSMS III and myself. We arrived at the site at approximately 2:00 p.m. and met with the facility manager, Ms. Anna Farrow, who excorted us on a tour through the facility.

Detrex Chemical is a warehouse facility used for the storage and distribution or chlorinated solvents. Detrex leases 8,000 square feet of space in an industrial building and has operated from this site since 1972. The area is primarily industrial with residences located nearby.

The site inspection revealed that current operations are limited to the storage of chlorinated solvents, both waste and virgin product, and the distribution of virgin solvents to Detrex customers. The majority of the product stored on site was contained in 55 gallon drums. The containers were stored in the warehouse area. Detrex is permitted to store 300 - 55 gallon drums of waste product at the site. The waste solvents are stored in a designated section of the warehouse.

Bulk storage of virgin solvents is contained in a 4,000 gallon storage tank within the warehouse and in two - 15,000 gallon storage tanks located in a concrete enclosure outside the facility. Detrex employees fill 55 gallon drums with the virgin solvents for distribution to customers.

All operation involving the transfer of product occur within the facility. The entire warehouse area is contained by a 3 inch berm capable of holding 10,000 gallons of material. The outside concrete vault, which encloses the two - 15,000 gallon tanks, is capable of containing approximately 43,000 gallons of material in the event of a spill.

The distillation unit, located in the warehouse area, has not been operated since March,1987.

The site inspection conducted this date confirmed that the facility is well maintained with limited operations occurring at the site.

ATTACHMENT V